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ATEN Digital KVM Solution

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Agenda

- What is Digital KVM Switch
- The benefits of Digital KVM Switch
- Digital KVM Switch vs Remote Access SW
- ATEN Digital KVM Switch Solutions
  - ATEN On the NET™ Series
  - ALTUSEN High-Density KVM Switch
  - ALTUSEN KVM Over the NET™
- Application Studies & Successful Story
- Competitor Overview

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The Challenges for IT Administrator

How to access heterogeneous IT devices in DC via single device?

How to diagnose IT devices when unexpected events occur?

How to manage IT devices using less components?

How to ensure secure access to IT devices?

How to save space and energy in DC?

How to access IT devices in remote site?

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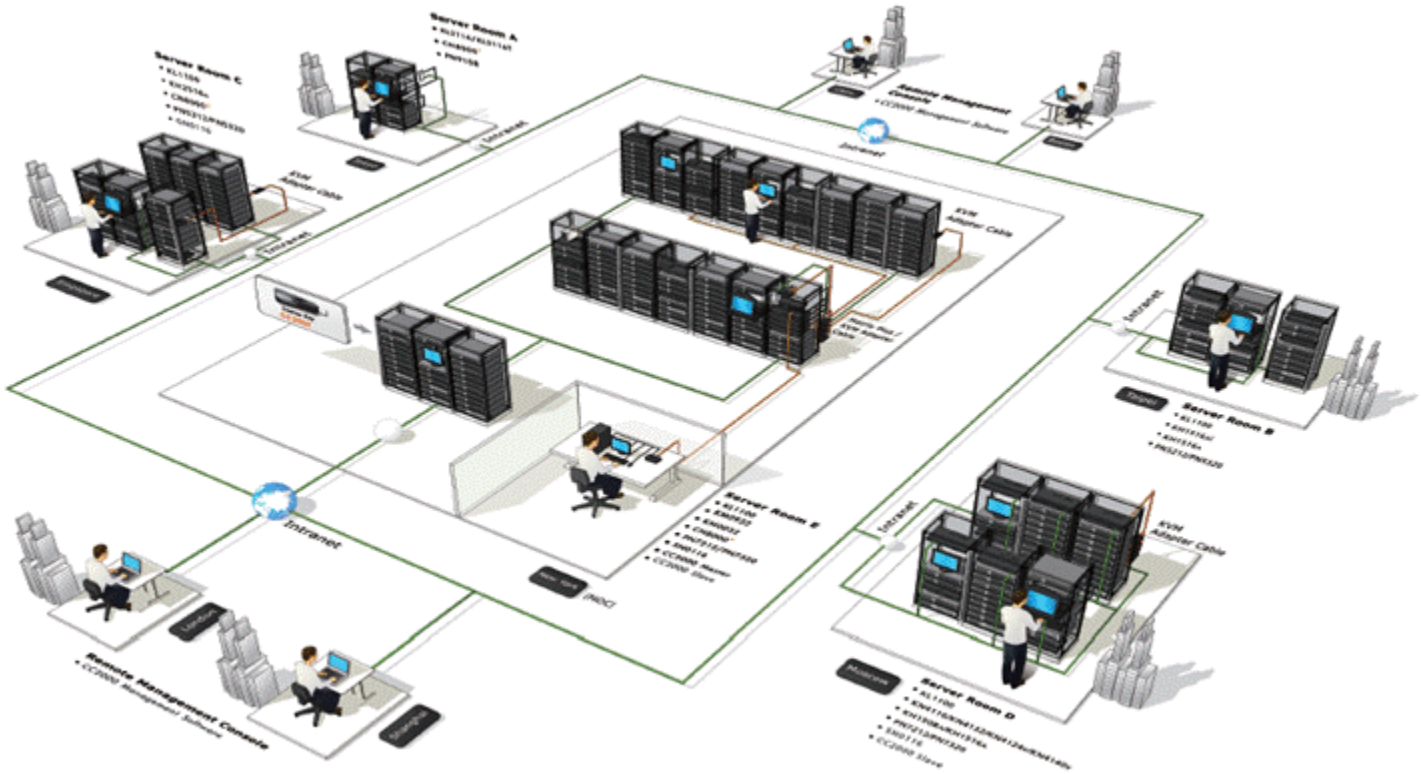
What is KVM over the NET™

- ALTUSEN KVM over the NET™ switches (KN Series) allows ***local and remote*** operators to ***BIOS-level*** control and access the entire enterprise data center over the Internet using a ***web-based browser***, as well as the ***external modem***, when the network is down.



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Benefits of KVM Over the NET™

- *Enables a faster response to mission-critical data center emergencies*
- *Allows administrators to manage more devices in multiple locations*
- *Eliminates the distance restrictions of server room management*
- *Facilitates the sharing of technical know-how between locations*
- *Provides secure, centralized management through a single interface*

Anytime, Anywhere you can access and fully control your servers via internet

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Digital KVM Switch

vs.

Remote Access Software

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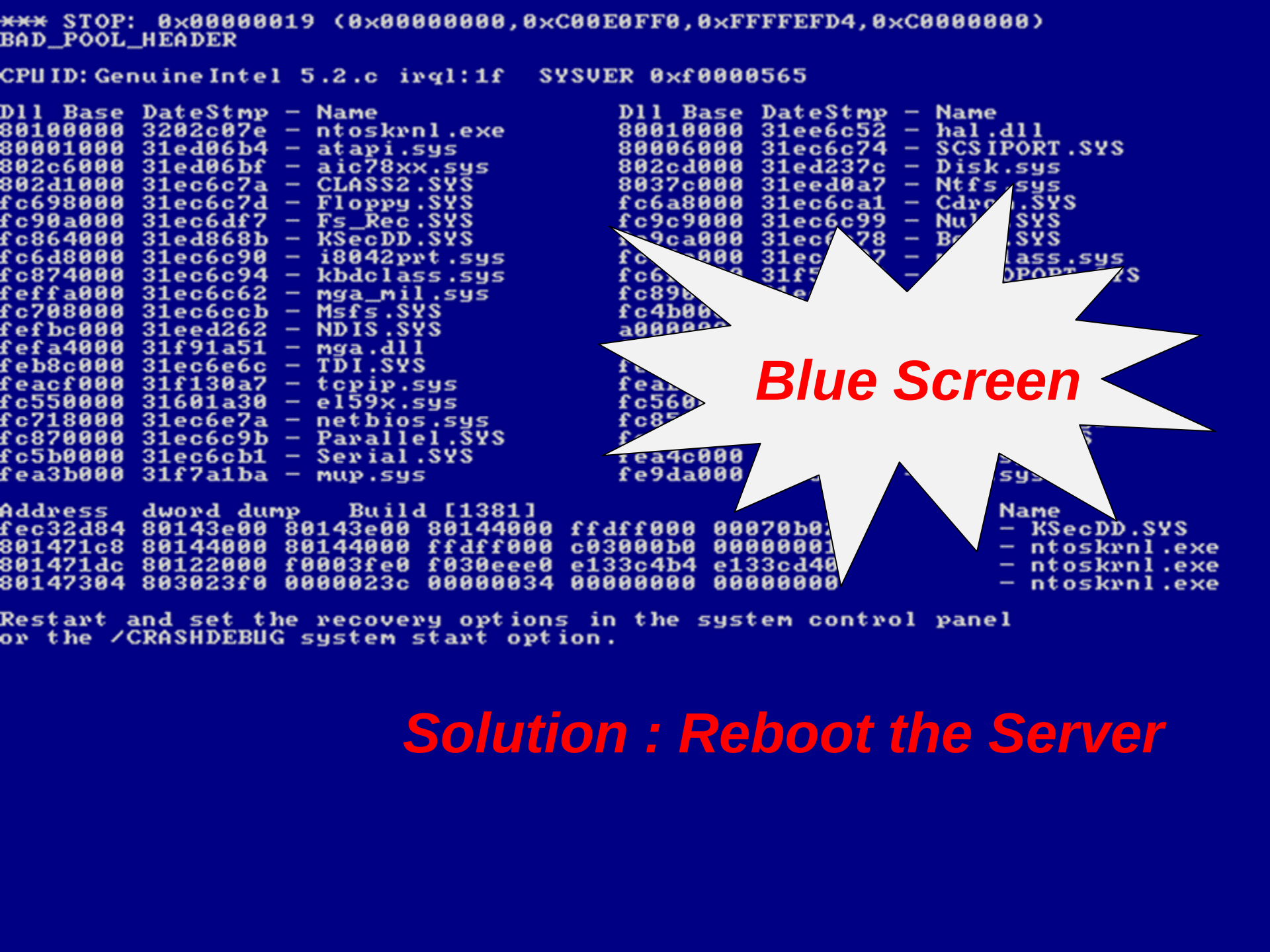
*** STOP: 0x00000019 (0x00000000,0xC00E0FF0,0xFFFFEFD4,0xC0000000)
BAD_POOL_HEADER
CPU ID: GenuineIntel 5.2.c irql:1f SYSVER 0xf0000565
Dll Base DateStmp - Name
80100000 3202c07e - ntoskrnl.exe
80001000 31ed06b4 - atapi.sys
802c6000 31ed06bf - aic78xx.sys
802d1000 31ec6c7a - CLASS2.SYS
fc698000 31ec6c7d - Floppy.SYS
fc90a000 31ec6df7 - Fs_Rec.SYS
fc864000 31ed868b - KSecDD.SYS
fc6d8000 31ec6c90 - i8042prt.sys
fc874000 31ec6c94 - kbdclass.sys
feffa000 31ec6c62 - mga_mil.sys
fc708000 31ec6ccb - Msfs.SYS
fefbc000 31eed262 - NDIS.SYS
fefa4000 31f91a51 - mga.dll
feb8c000 31ec6e6c - TDI.SYS
feacf000 31f130a7 - tcpip.sys
fc550000 31601a30 - el59x.sys
fc718000 31ec6e7a - netbios.sys
fc870000 31ec6c9b - Parallel.SYS
fc5b0000 31ec6cb1 - Serial.SYS
fea3b000 31f7a1ba - mup.sys
Dll Base DateStmp - Name
80010000 31ee6c52 - hal.dll
80006000 31ec6c74 - SCSIPORT.SYS
802cd000 31ed237c - Disk.sys
8037c000 31eed0a7 - Ntfs.sys
fc6a8000 31ec6ca1 - Cdrom.SYS
fc9c9000 31ec6c99 - Null.SYS
Blue Screen
Address dword dump Build [1381] Name
fec32d84 80143e00 80143e00 80144000 ffdff000 00070b0? - KSecDD.SYS
801471c8 80144000 80144000 ffdff000 c03000b0 0000000? - ntoskrnl.exe
801471dc 80122000 f0003fe0 f030eee0 e133c4b4 e133cd40 - ntoskrnl.exe
80147304 803023f0 0000023c 00000034 00000000 00000000 - ntoskrnl.exe
Restart and set the recovery options in the system control panel
or the /CRASHDEBUG system start option.
Solution : Reboot the Server

Digital KVM Switch vs. Remote Software

	Digital KVM Switch	Software (VNC,PCAnywhere)
OS independent	Yes	No
Application independent	Yes	No
Network independent	Yes, with OOBC support	No
Server independent	Yes	No
BIOS Access	Yes	No
Reboot Server	Yes, with PN	No
Security	Yes	No
Central Management	Yes	No

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KVM on the NET™

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KVM on the NET™ - CN8000

- 0U, slim-sized 1 port KVM-Over-IP appliance
- Allow 1 Local or Remote User to access and control 1 Server or non-IP KVM Switch
- The Best Solution to enable the Over-IP capability for a single server or the existing KVM Switch

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KVM on the NET™ - CN8000

- Video resolution up to 1600 x 1200 @ 60Hz; **24-bit color depth**
- Mouse DynaSync™ – automatically synchronizes the local and remote mouse movements for perfect alignment of mouse pointers
- Full-screen or sizable remote desktop window
- Up to 64 user accounts – up to 32 concurrent user logins
- External Authentication Support – RADIUS, LDAP(S), MS AD
- PON (Power Over the NET™) support via Java
- Virtual Media, Smart Card/CAC Reader Support
- Serial Console Access Support
- Exit Macro Support

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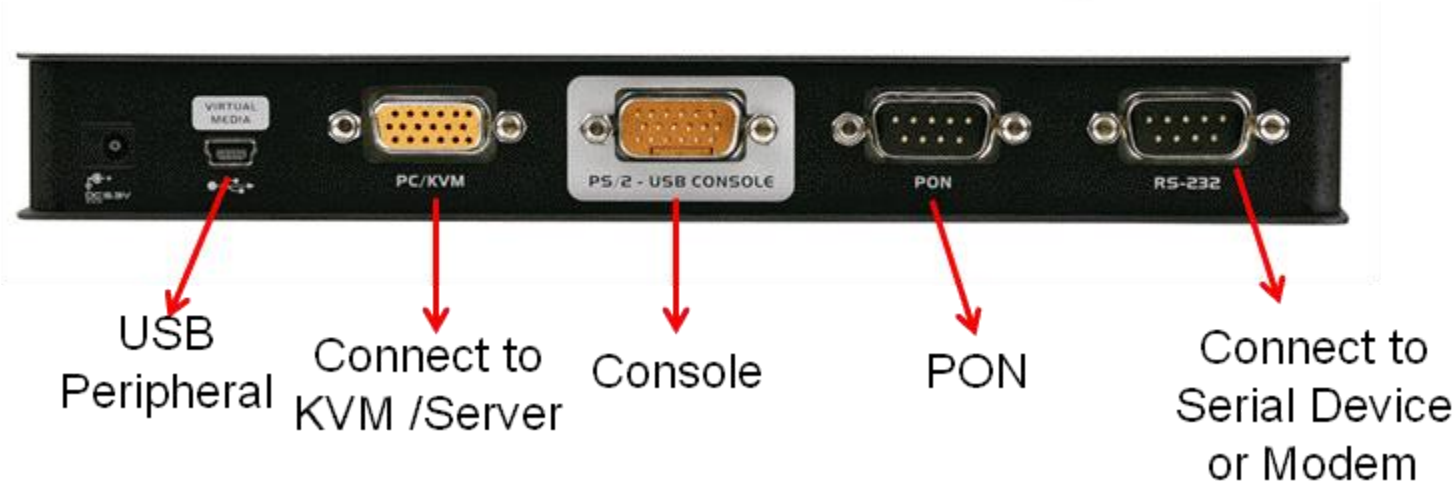
CN8000



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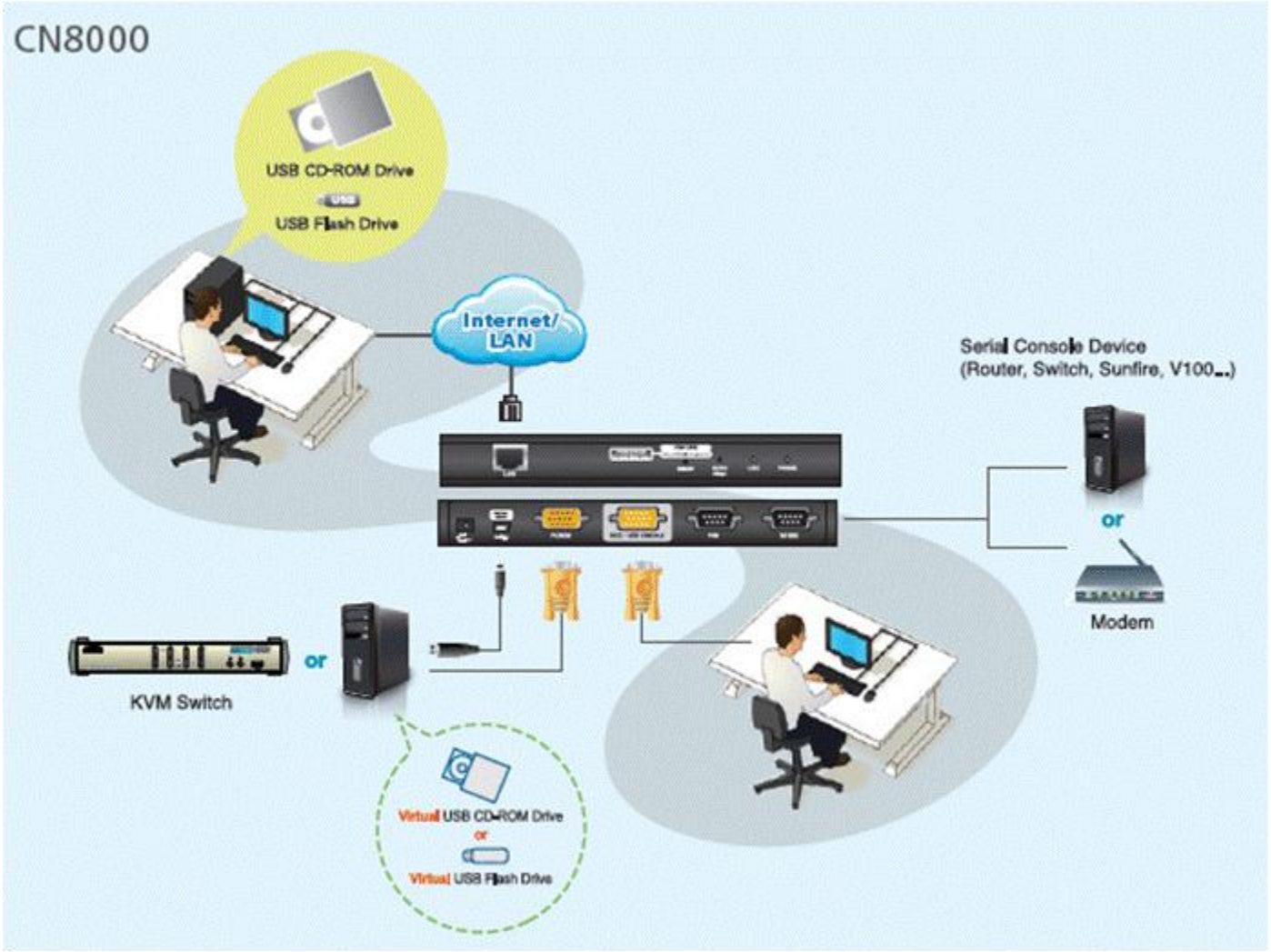
Connection Diagram - CN8000



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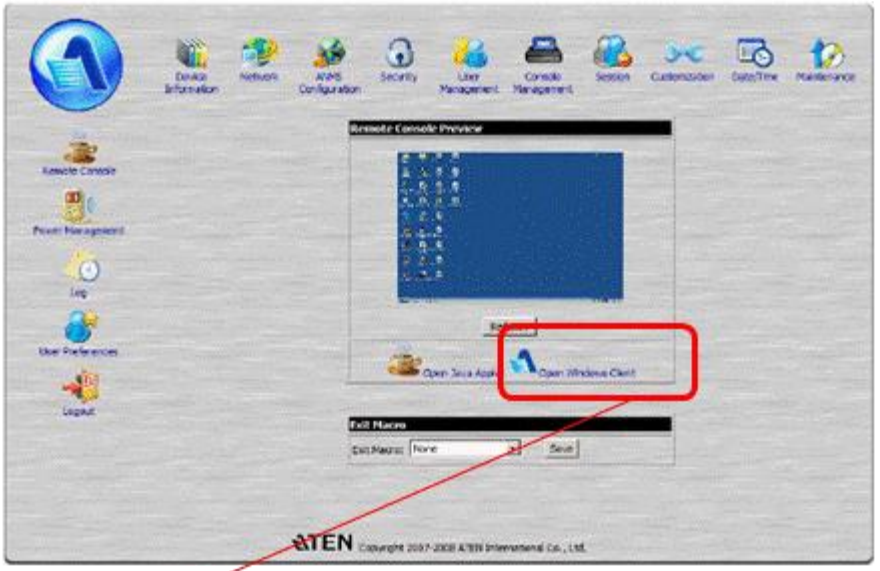
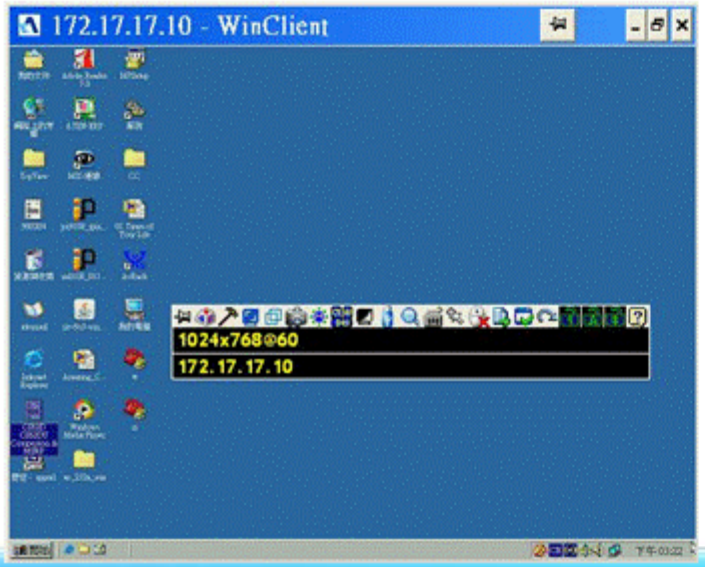
Management Console

Step 1 : Login with ID/Password via Web browser

Step 2 : Main Page





Step 3 : Using WinClient to access the server

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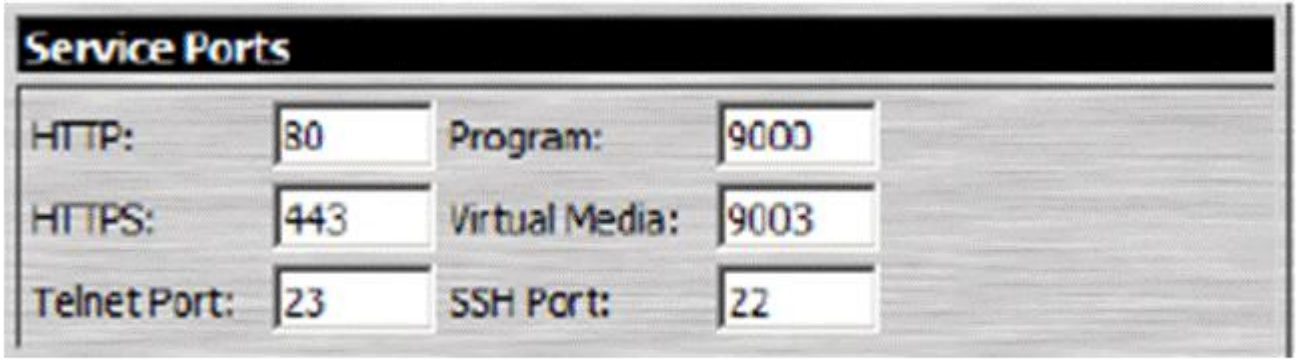
Service Ports

If a firewall is being used, the Administrator can specify the port numbers that the firewall will allow



Log : 9001

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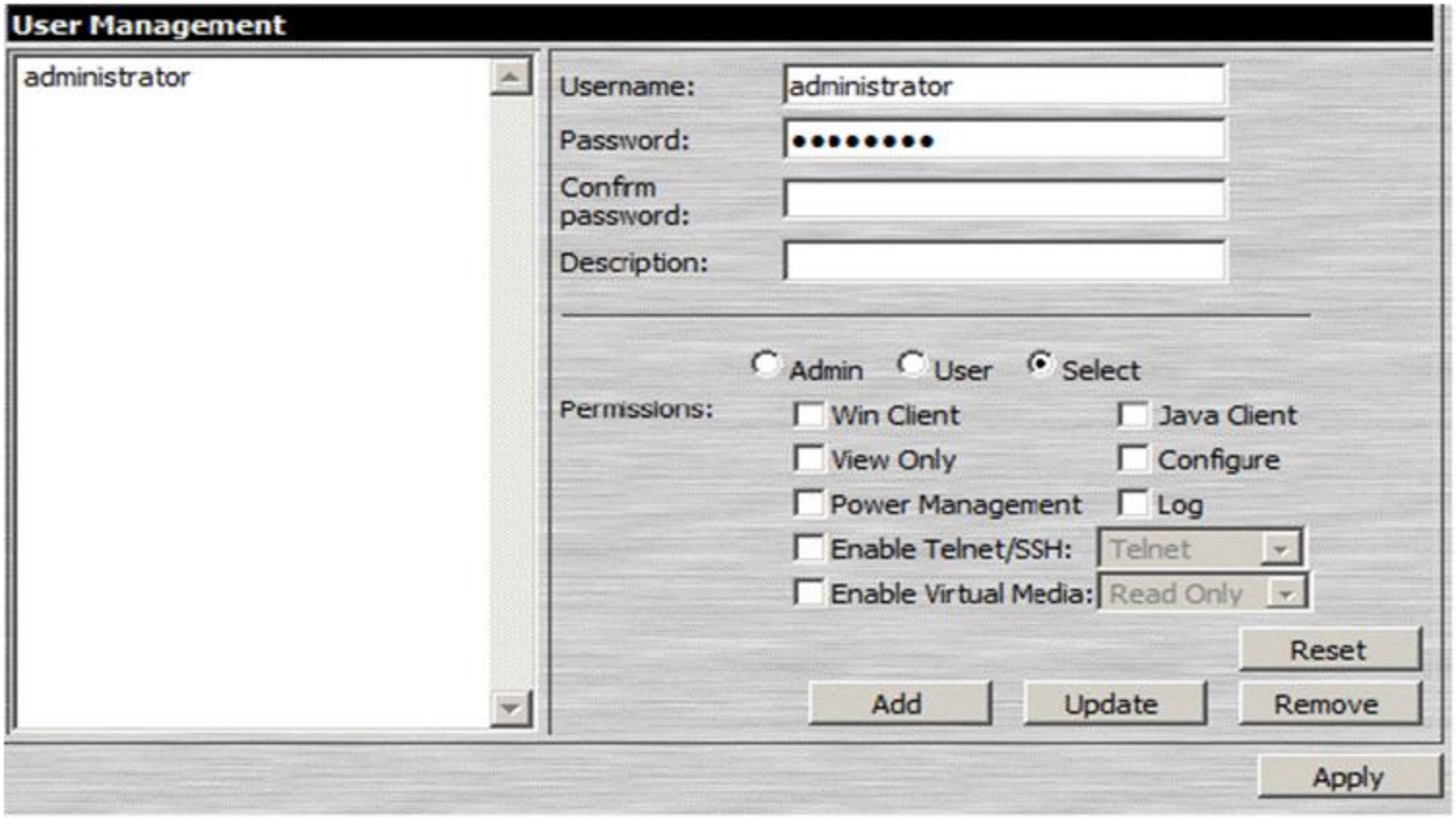
User Level Access Right



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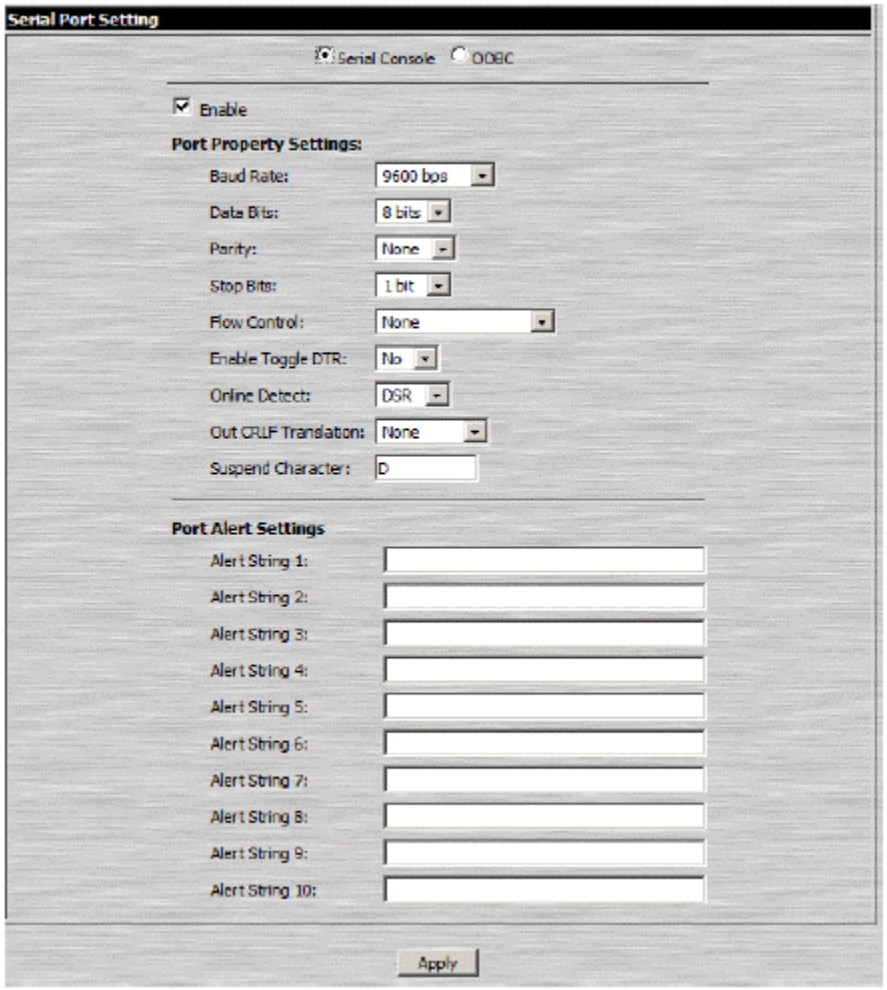
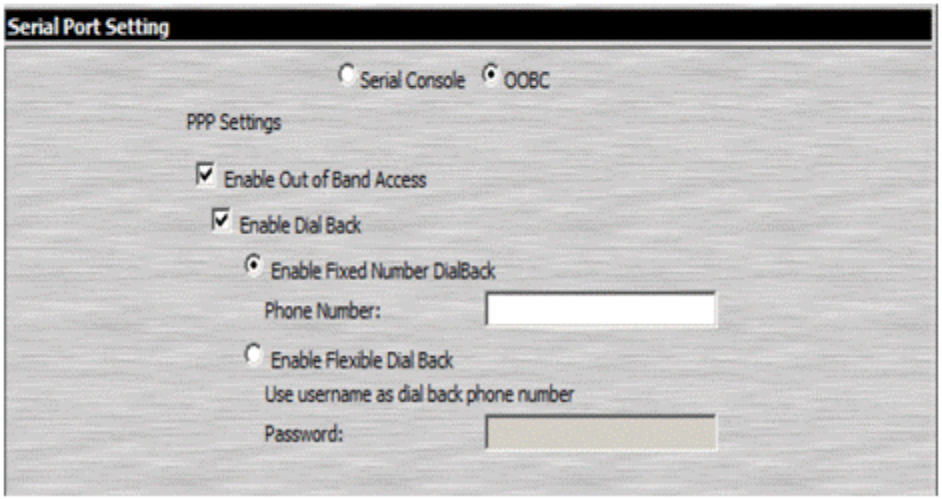
RS-232 Serial Port



1. Serial Connection
   - Connect to Serial device via CN8000
2. OOBC: Connect to modem
   - Dial in / Dial back / Dial out



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Virtual Media

WinClient ActiveX Viewer / WinClient AP

- IDE CDROM/DVD-ROM Drives – Read Only
- USB CDROM/DVD-ROM Drives – Read Only
- IDE Hard Drives – Read Only
- ISO Files – Read Only
- USB Hard Drives – Read/Write
- USB Flash Drives – Read/Write
- USB Floppy Drives – Read/Write
- Folders – Read/Write
- Smart Card Readers

Java Applet Viewer / Java Client AP

- ISO Files – Read Only
- Folders – Read/Write

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USB Hard Drives / USB Flash Drives

- These drives can be mounted either as Drives or Removable Disks.
- Mounting them as removable disks allow booting the remote server if the disk contains a bootable OS.
- If the disk contains more than one partition, the remote server can access all the partitions.

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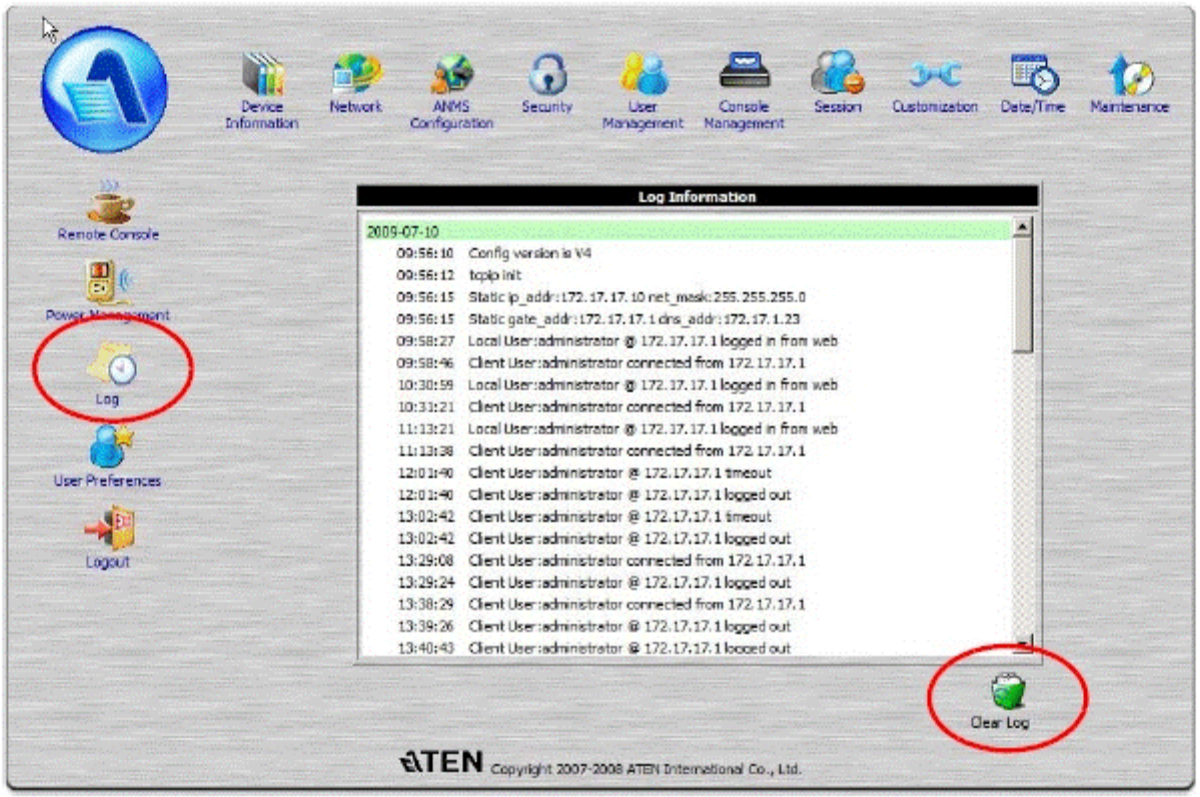
System Log


Device Information
Network
ANMS Configuration
Security
User Management
Console Management
Session
Customization
Date/Time
Maintenance
Remote Console
Power Management
Log
User Preferences
Logout
Log Information
2009-07-10
09:56:10 Config version is V4
09:56:12 tcpip init
09:56:15 Static ip_addr:172.17.17.10 net_mask:255.255.255.0
09:56:15 Static gate_addr:172.17.17.1 dns_addr:172.17.1.23
09:58:27 Local User:administrator @ 172.17.17.1 logged in from web
09:58:46 Client User:administrator connected from 172.17.17.1
10:30:59 Local User:administrator @ 172.17.17.1 logged in from web
10:31:21 Client User:administrator connected from 172.17.17.1
11:13:21 Local User:administrator @ 172.17.17.1 logged in from web
11:13:38 Client User:administrator connected from 172.17.17.1
12:01:40 Client User:administrator @ 172.17.17.1 timeout
12:01:40 Client User:administrator @ 172.17.17.1 logged out
13:02:42 Client User:administrator @ 172.17.17.1 timeout
13:02:42 Client User:administrator @ 172.17.17.1 logged out
13:29:08 Client User:administrator connected from 172.17.17.1
13:29:24 Client User:administrator @ 172.17.17.1 logged out
13:38:29 Client User:administrator connected from 172.17.17.1
13:39:26 Client User:administrator @ 172.17.17.1 logged out
13:40:43 Client User:administrator @ 172.17.17.1 logged out
Clear Log
ATEN Copyright 2007-2008 ATEN International Co., Ltd.

Event Log :

- A maximum of 512 events are kept in the log file.
- there are 512 events in the log file, the earliest event in the list is discarded

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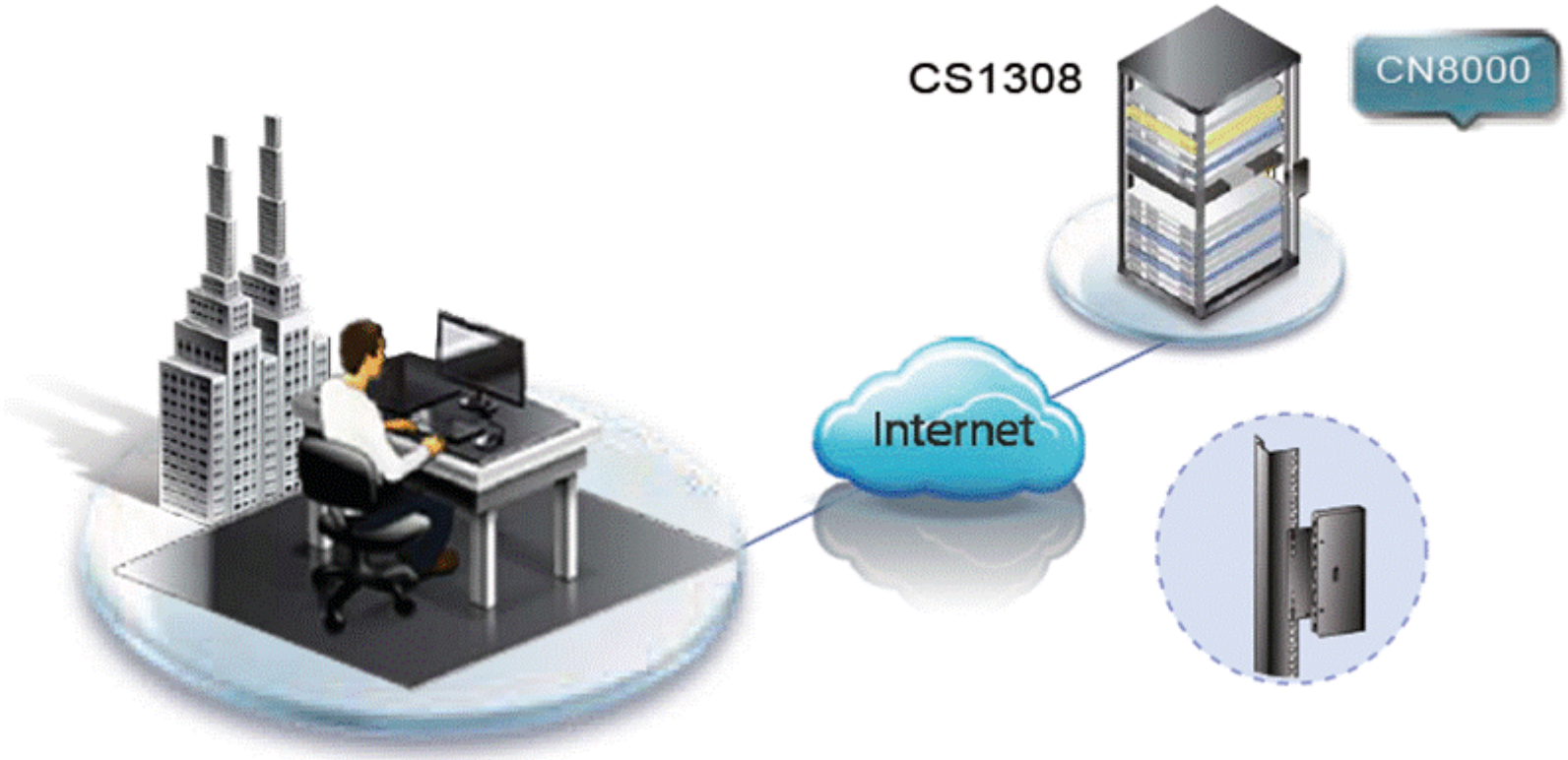
Applications – Rack KVM + Over IP

The customers had had the analog KVM Switches, but would like to extend the capability of IP Accessing



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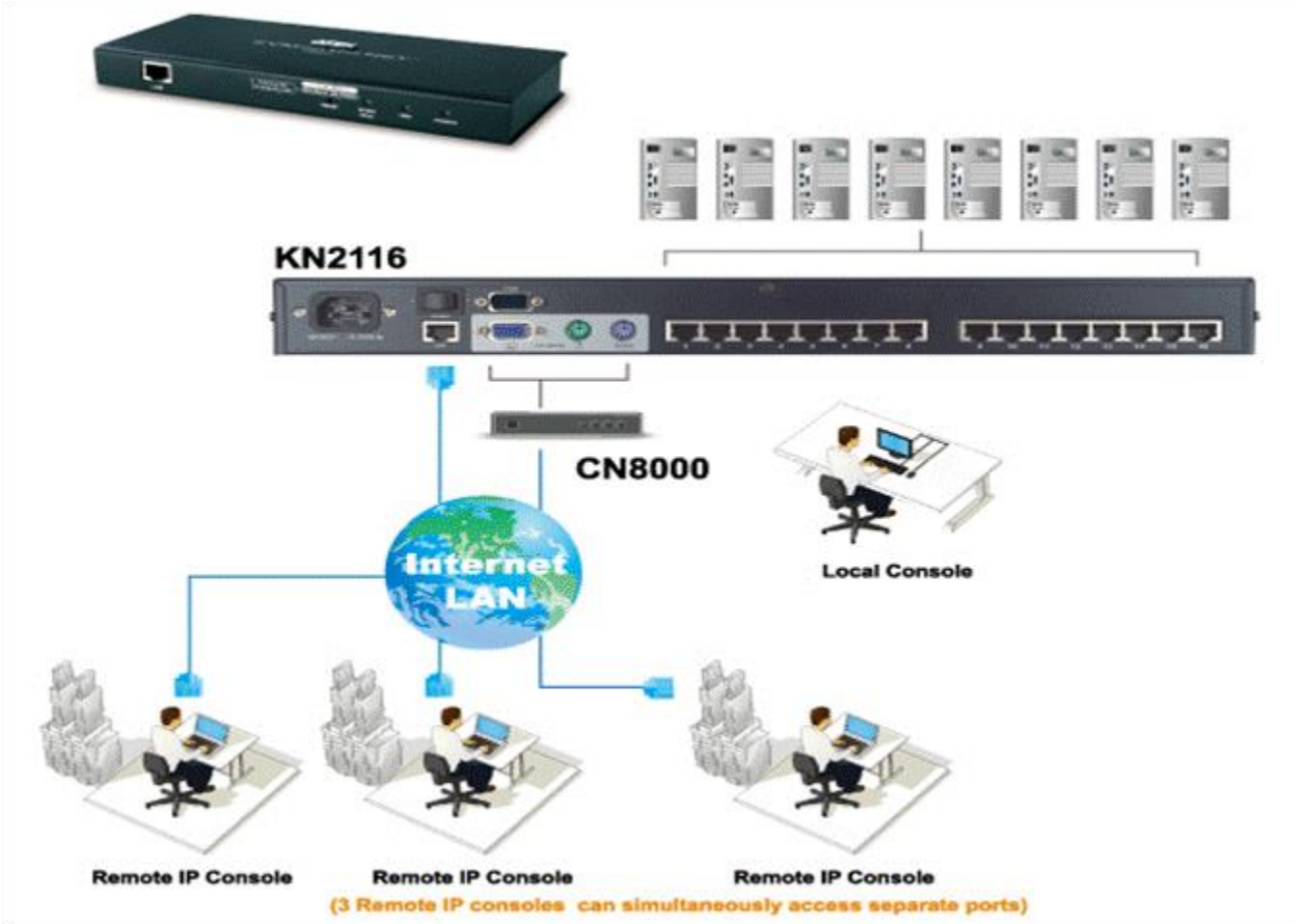
Application: CN8000 Integrated Solution

CN8000 gives operators unlimited off-site server access.



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Remote Management PCI Card

- A standard PCI-sized card provides over-IP access and control of a remote server from anywhere in the world
- Multiple OS support, including Windows ; Redhat 7.1 and above; FreeBSD, Novell

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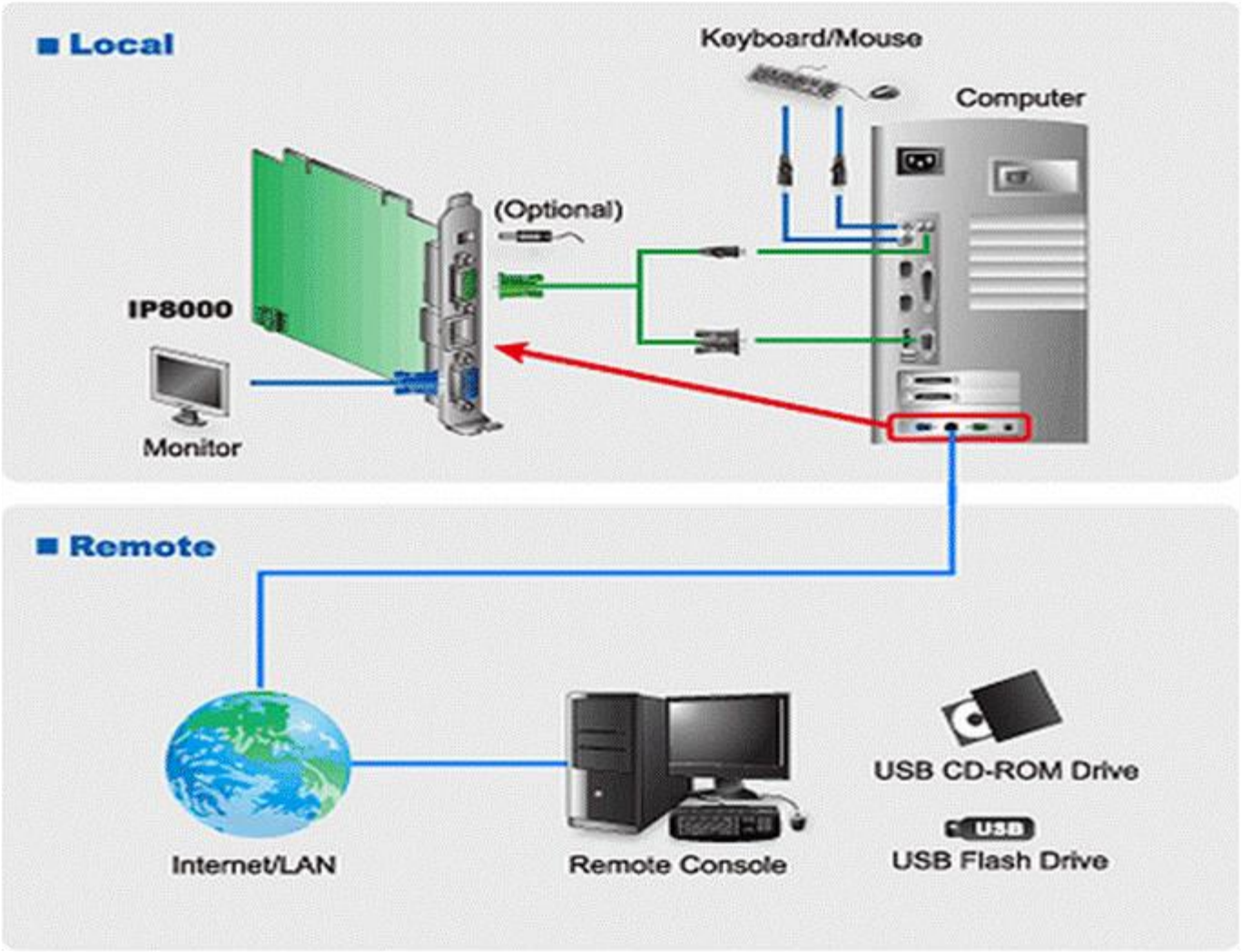
Connection Diagram - IP8000



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Features - IP8000

- Virtual media via USB 2.0 data transmission
- Remote power control and reset
- support Up to 64 user accounts - Up to 32 concurrent user logins for single-bus sharing
- Message board feature allows logged in users to communicate with each other, and allows a user to take exclusive control of the KVM functions
- External authentication support: RADIUS; LDAP; LDAPS; MS AD
- Superior video resolution* up to 1600 x 1200 @ 60Hz; 24-bit color depth for remote sessions
- Bandwidth optimization via grayscale and video quality setting
- Advanced security features include password protection and advanced encryption technologies Secure 128-bit SSL encryption
- Enable/disable browser operation
- Three level authentication - Multi - Administrators, Users, Viewers
- Event logging

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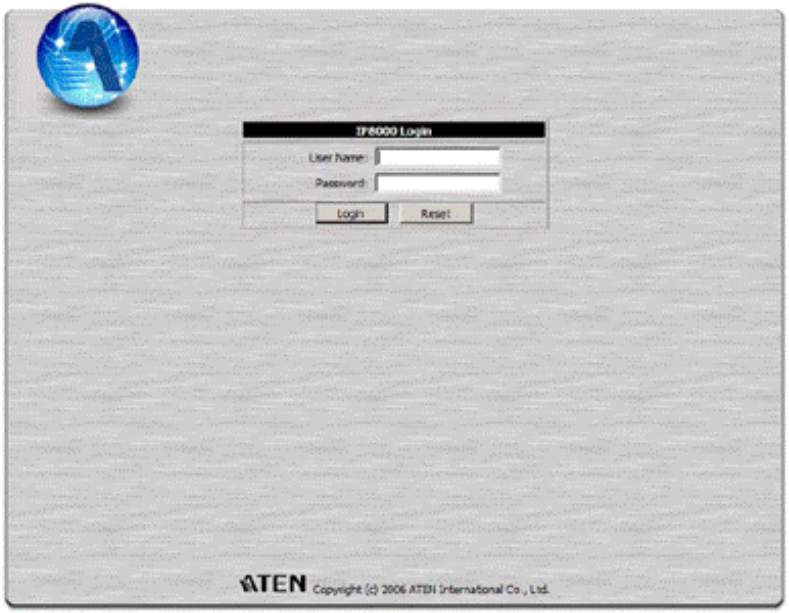
Management Console

Step 1 : Login with ID/Password via Web browser



Step 2 : Main Page

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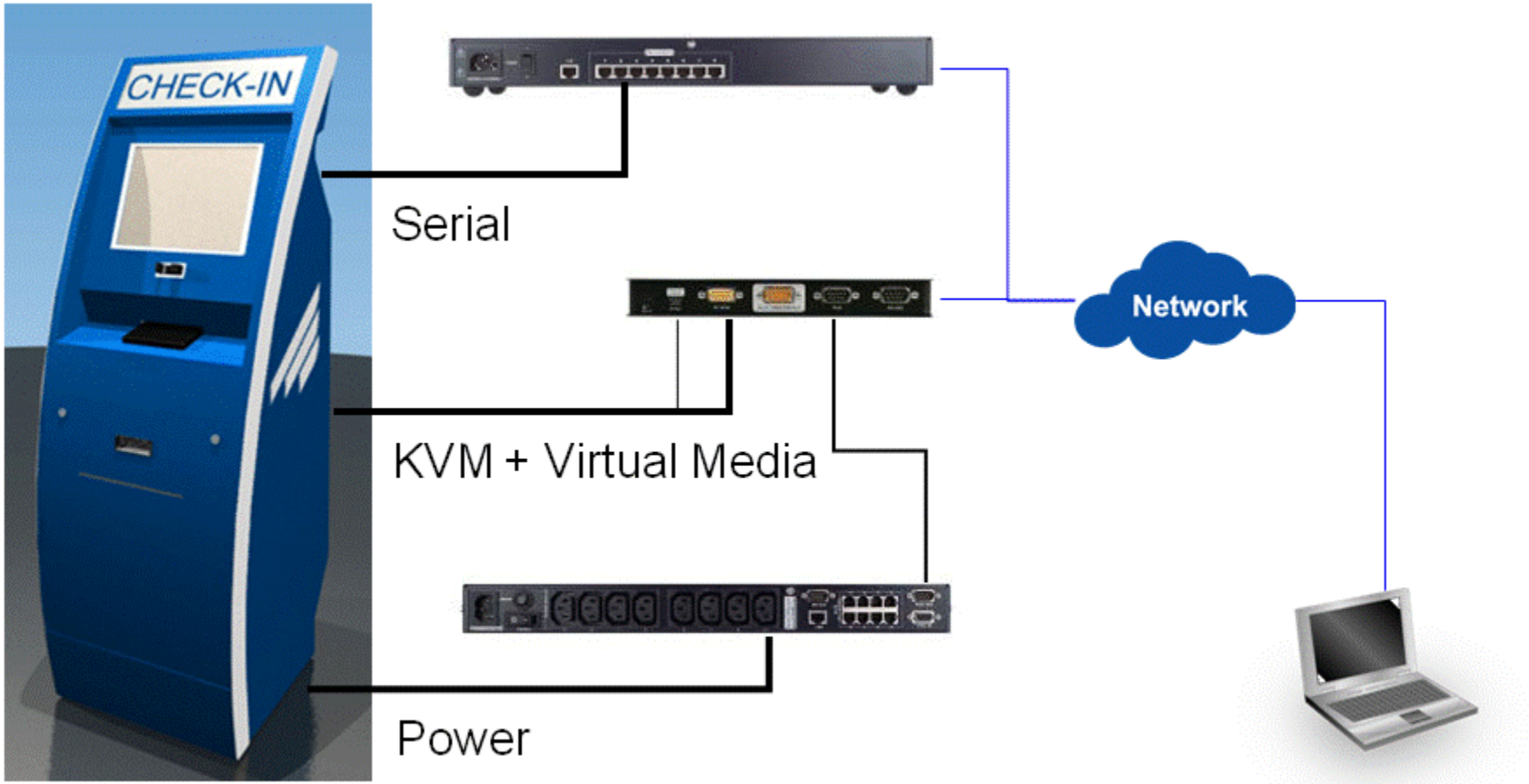
Remote Site Management…Yesterday



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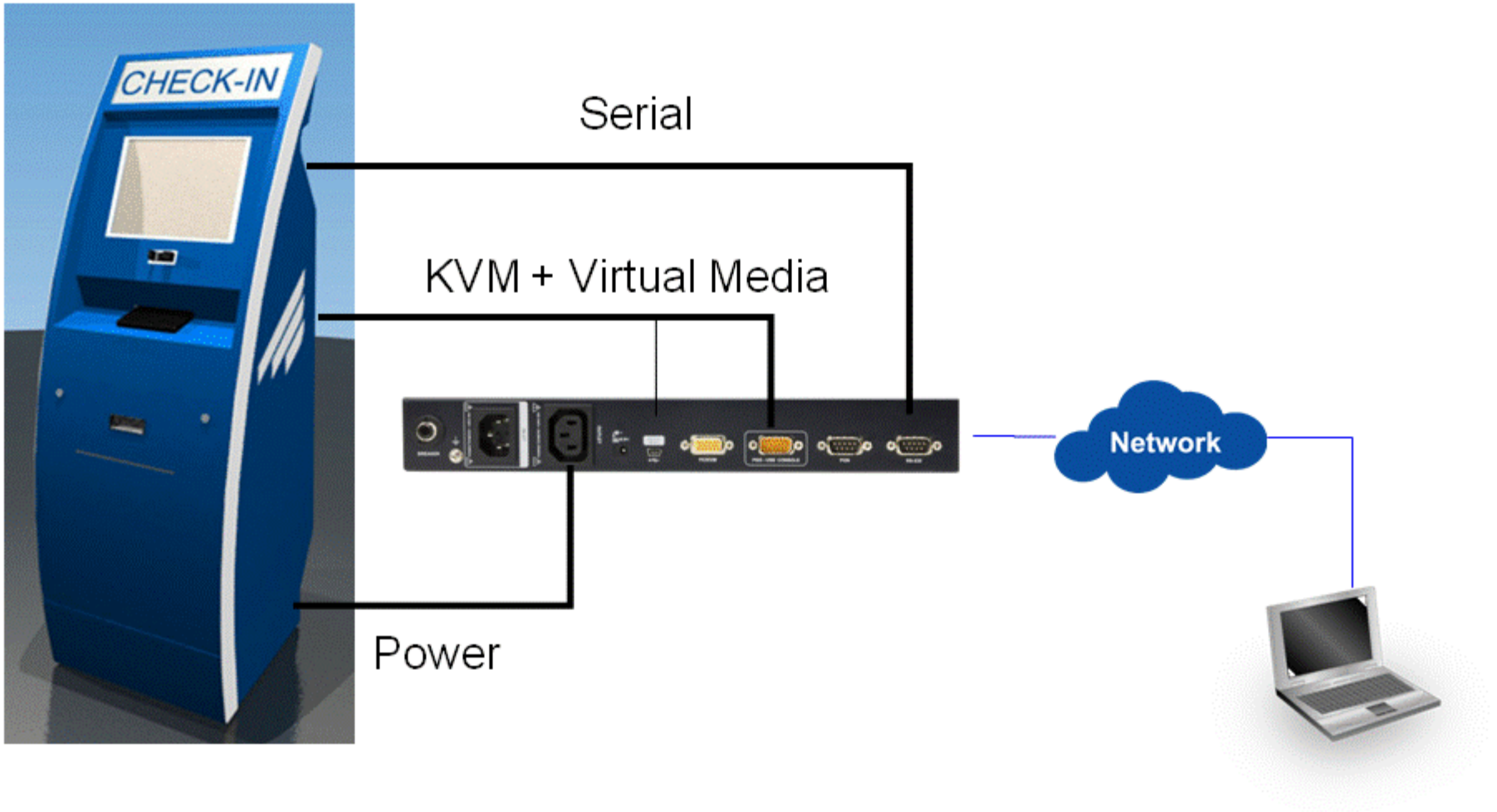
Remote Site Management…Now!



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KN1000 Introduction & Features

- 3-in-one Solution
  - 1 port KVM over IP +
  - 1 port Power Relay (On/Off) +
  - 1 port Serial function
- Virtual Media Support
- High video resolution
  - up to 1600 x 1200 @ 60Hz- 32 bit color depth for the local console,
  - up to 1600 x 1200 @ 60Hz - 24 bit color depth for remote sessions
- Enhanced fps (frames per second) throughput for crisp responsive video display
- Serial console management

  – serial terminal access via a built-in serial viewer, or via third party software (such as PuTTY) for Telnet and SSH sessions.

The Only 3-in-1 Solution in the Market

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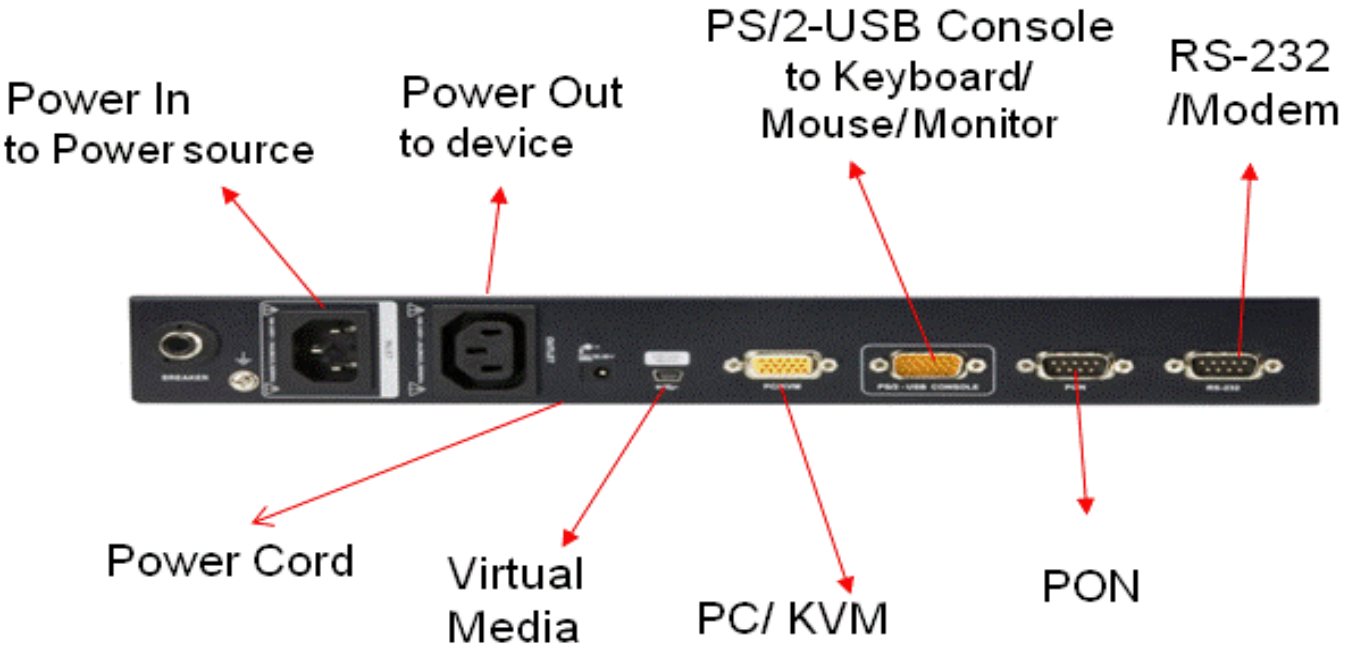
KN1000



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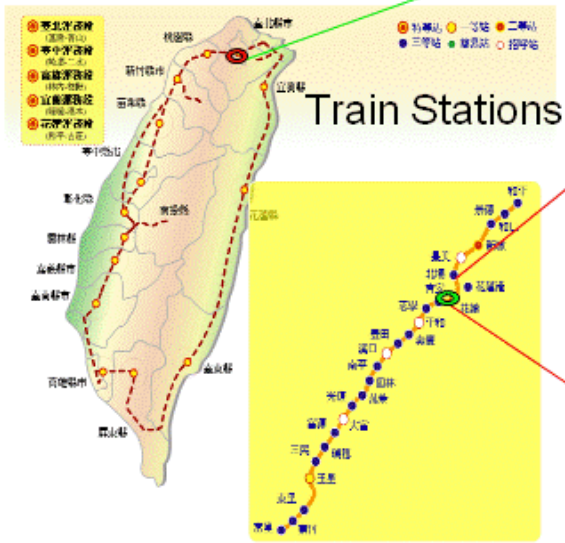
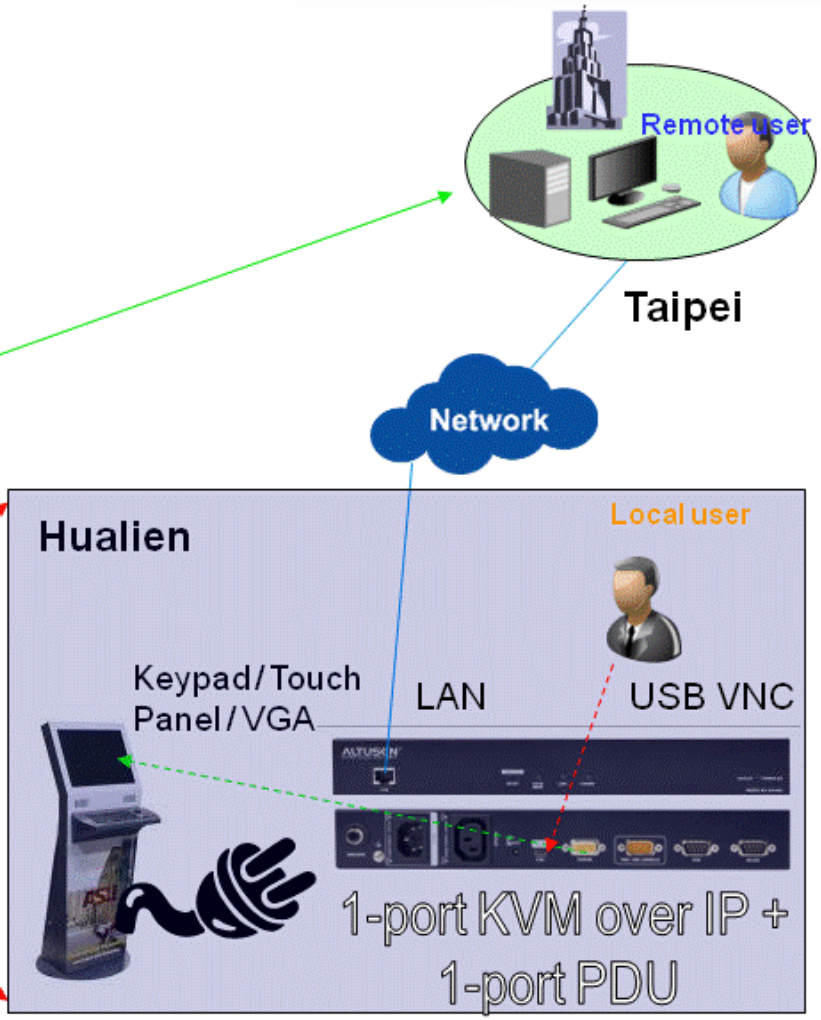
KN1000 Target Market

- Target Market:
  - ATM/ Kiosk application
  - Railway control station
  - Mobil /Telecom base station
  - Unmanned remote site
  - IPC for Border control





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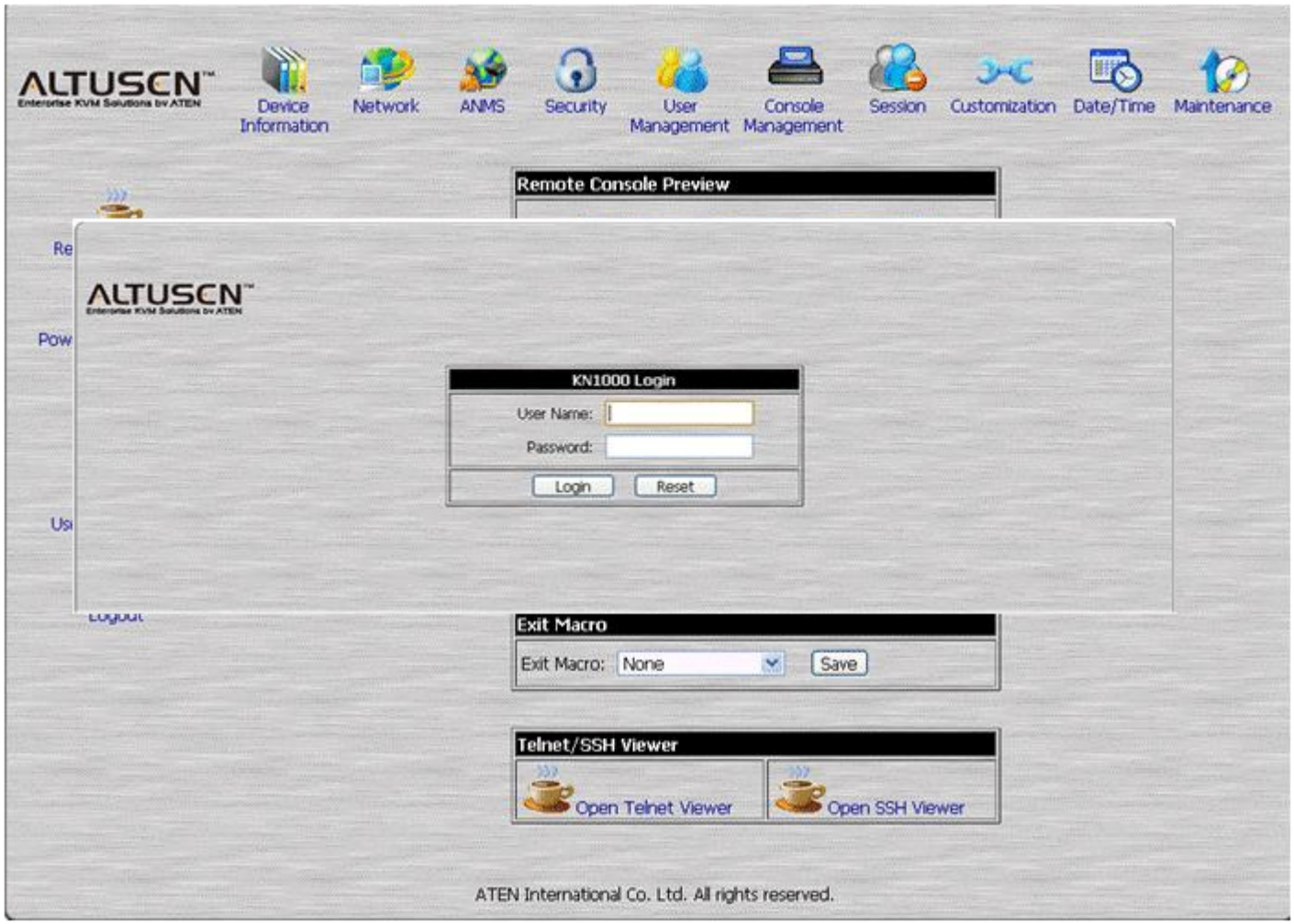
KN1000 – User Console



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KN1000 – Remote Console

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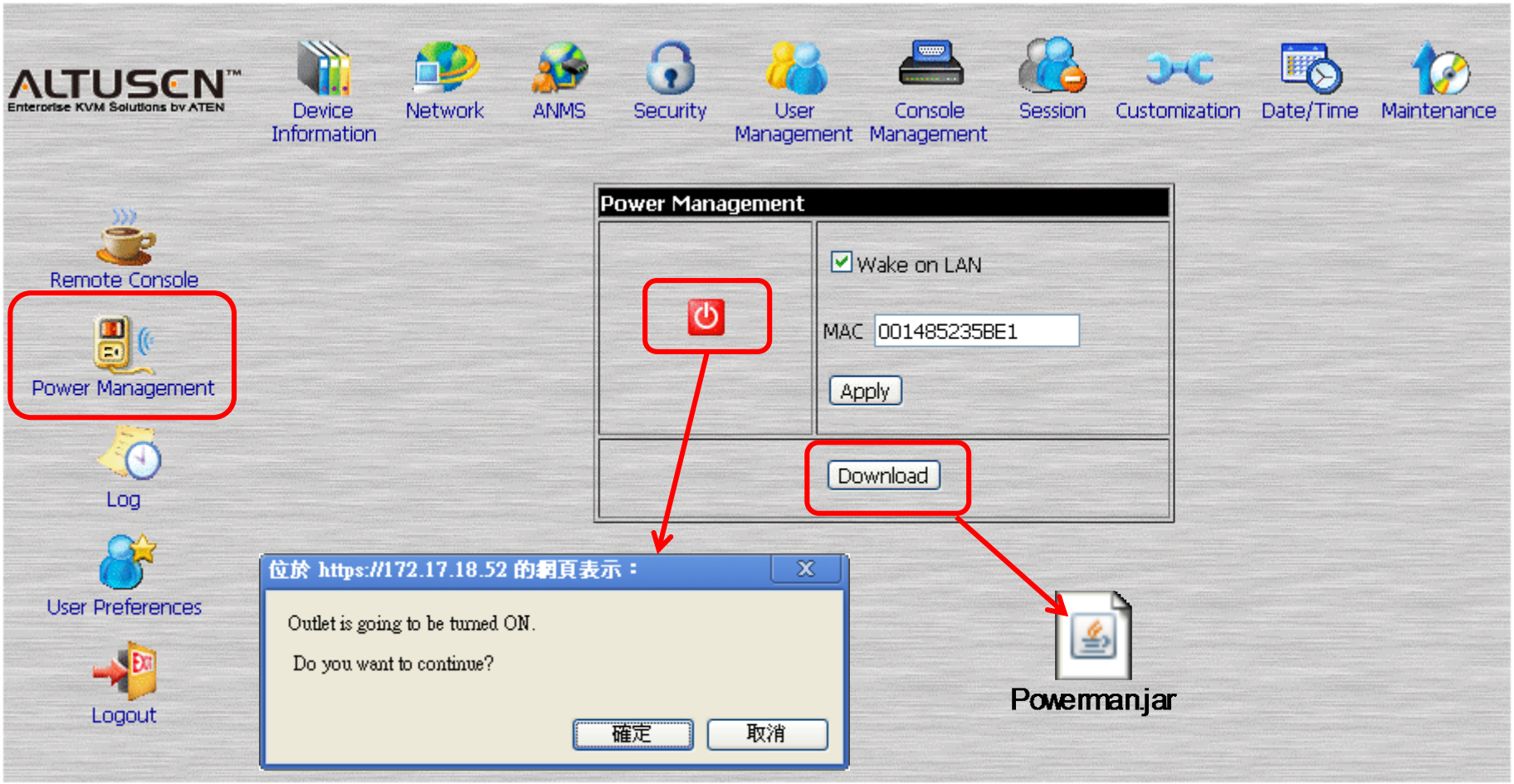
KN1000 – Power Management



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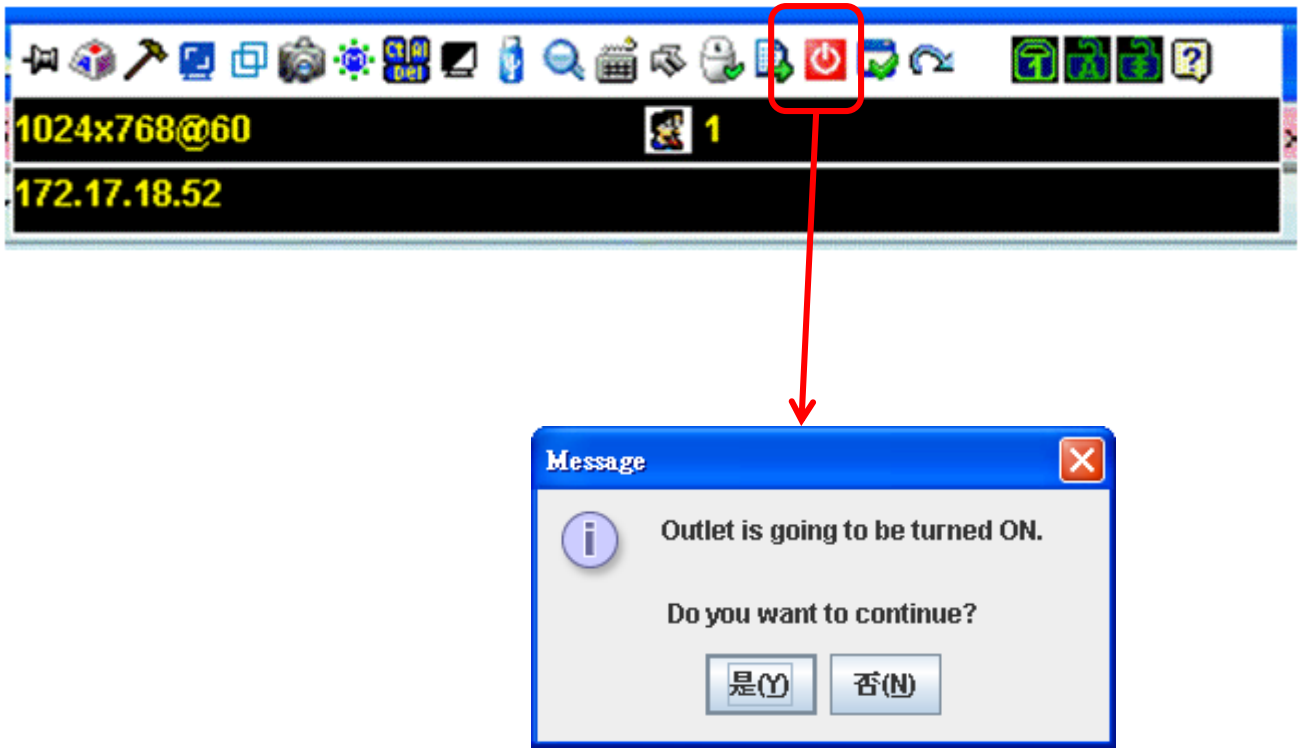
KN1000 – Power Management



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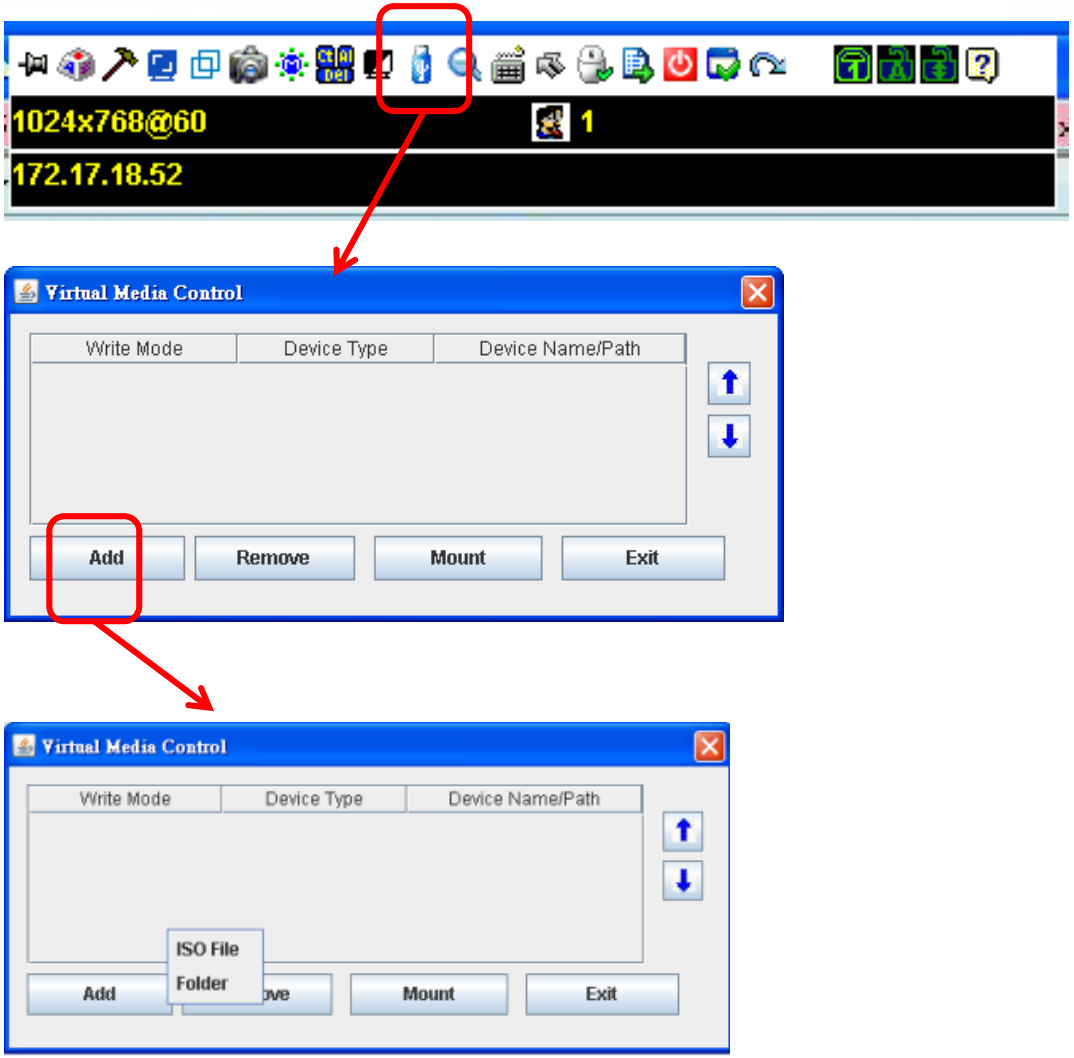
KN1000 – Virtual Media



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ATEN CS1708i / CS1716i

- The Most Economy KVM-Over-IP Solution for Single Rack server room
- An IP-based KVM Switch that allows 1 local/remote (1 bus) console to manage and access 8/16 Servers, up to 128/512 servers via Daisy Chain.
- Using KVM Cable to connect to servers

2L-520x P
2L-5702P

2L-520xU

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KVM on the NET™ - CS1708i/1716i

8/16-Port PS/2-USB KVM on the NET™ ***(With 1 Local/Remote User Access)***

- Daisy chain up to 15 additional units – control up to 128 or 256 servers and Up to 32 concurrent logins
- Two level password security - up to 64 user accounts with separate profiles for each
- Message board – allows users to communicate with each other
- Panel array mode - monitor multiple servers at the same time
- External (Remote) authentication support
  – RADIUS, LDAP, LDAPS, MS Active Directory
- Video DynaSync™ – exclusive ATEN technology eliminates boot-up display problems and optimizes resolution when switching between ports
- Mouse DynaSync™ – automatically synchronizes the local and remote mouse movements for perfect alignment of mouse pointers
- USB Peripheral Sharing to each computer connected to Switch

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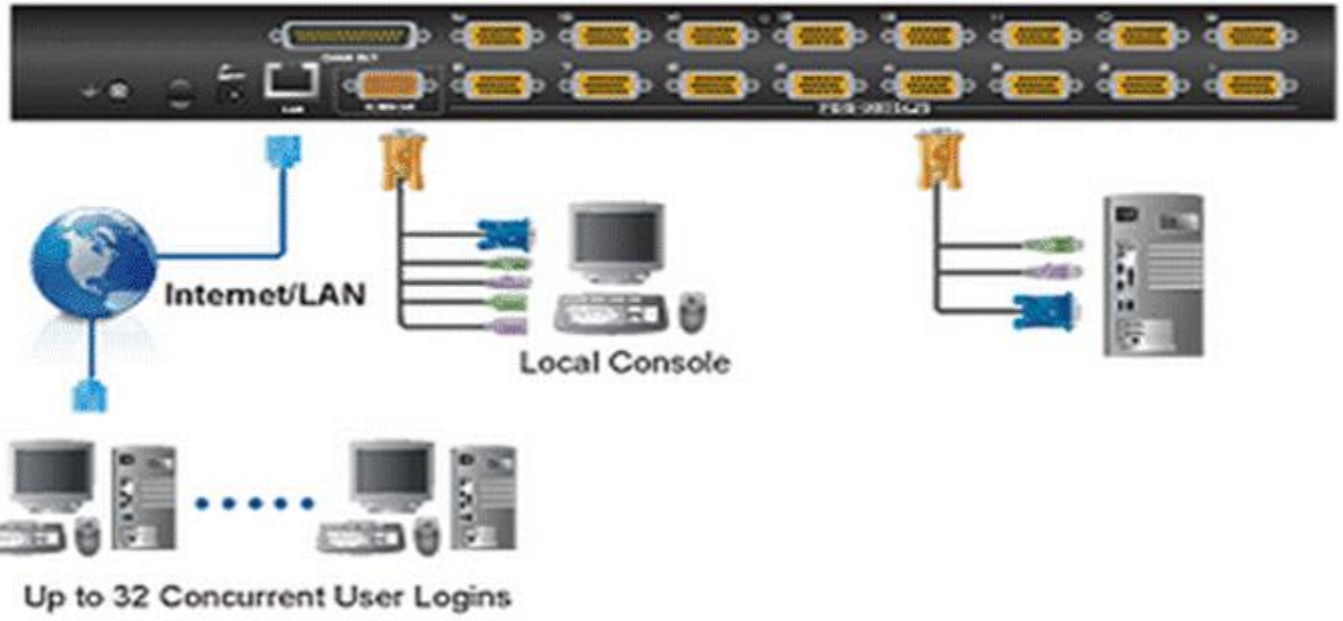
Connection Diagram – CS1708i/1716i

CS1716i Front View

CS1716i Rear View



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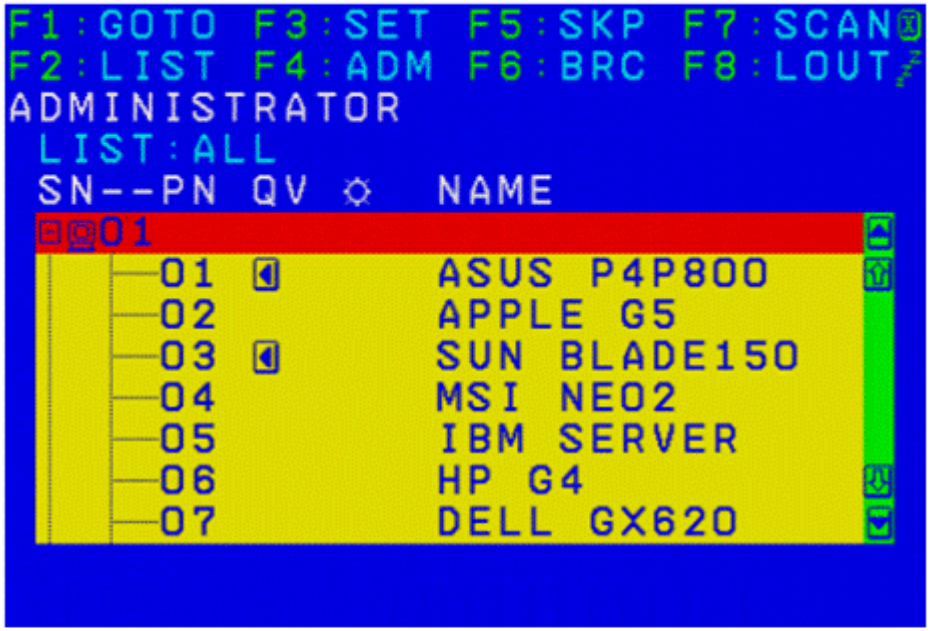
Management Console

Local Console - OSD



Remote Web Console

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Application – Rack KVM + Over IP

1. The customers would like to replace the current analog KVM Switches
2. Would like to extend the capability of IP Accessing

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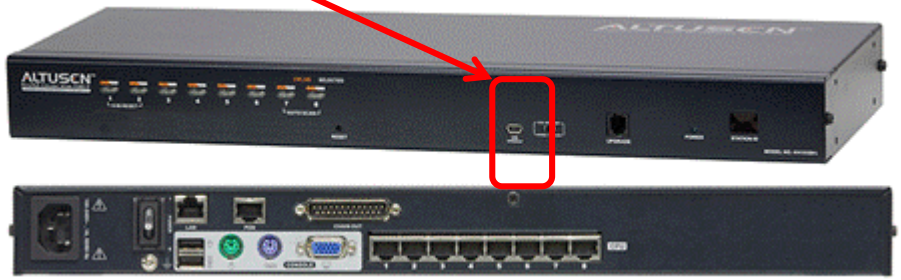
ALTUSEN High-Density KVM Switch

KH1508Ai / KH1516Ai

Cat 5 High-Density KVM Over the NET™

- Allow **1 remote / 1 local user** to access and control 8/16 devices in a 1U housing and up to **256/512** devices via Daisy-Chaining
- The Best Solution for Small & Medium-sized server room and Branch office
- Easy for deployment and Affordable
- VNC Console for local Access



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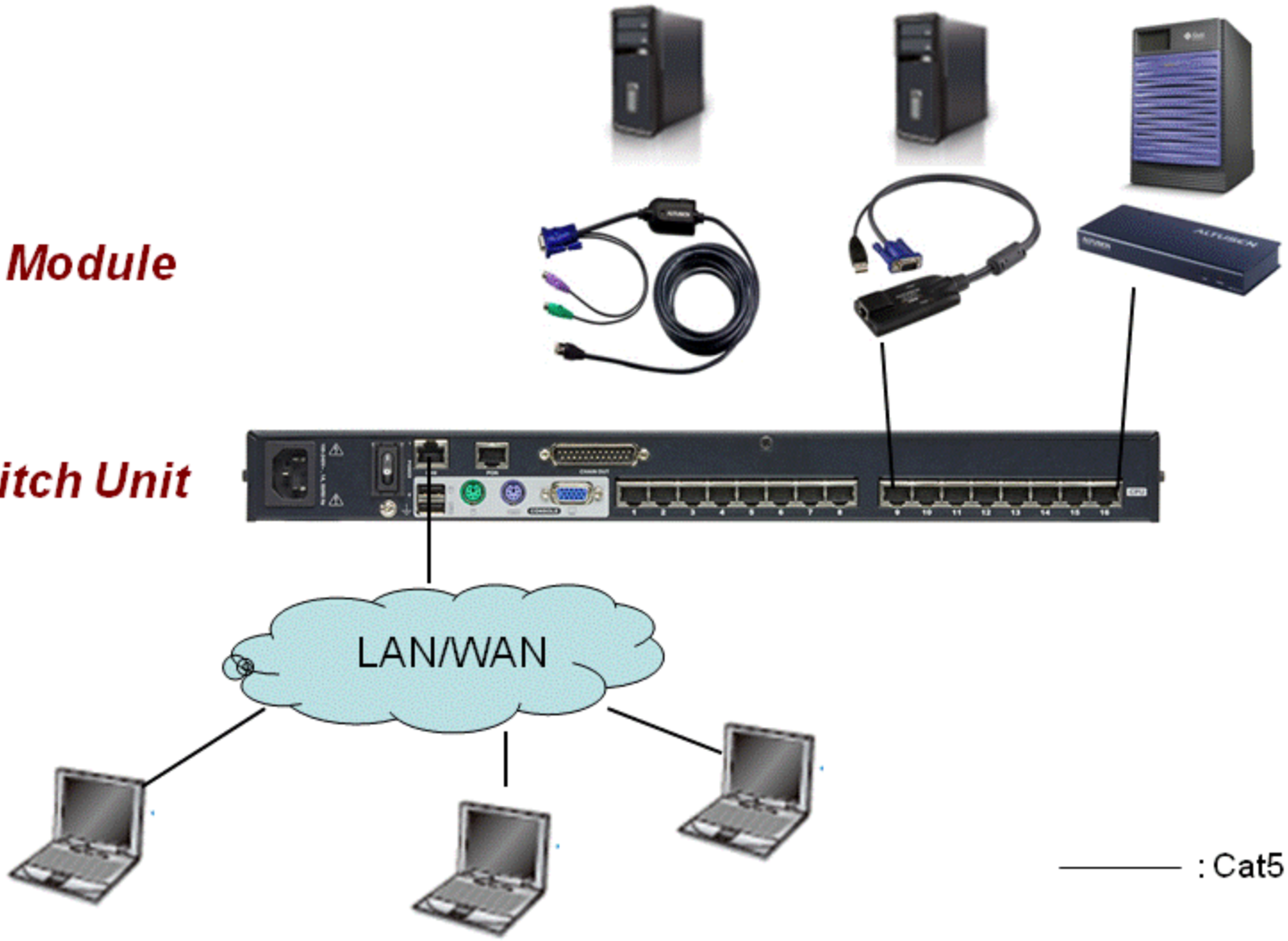
ALTUSEN High-Density KVM Switch



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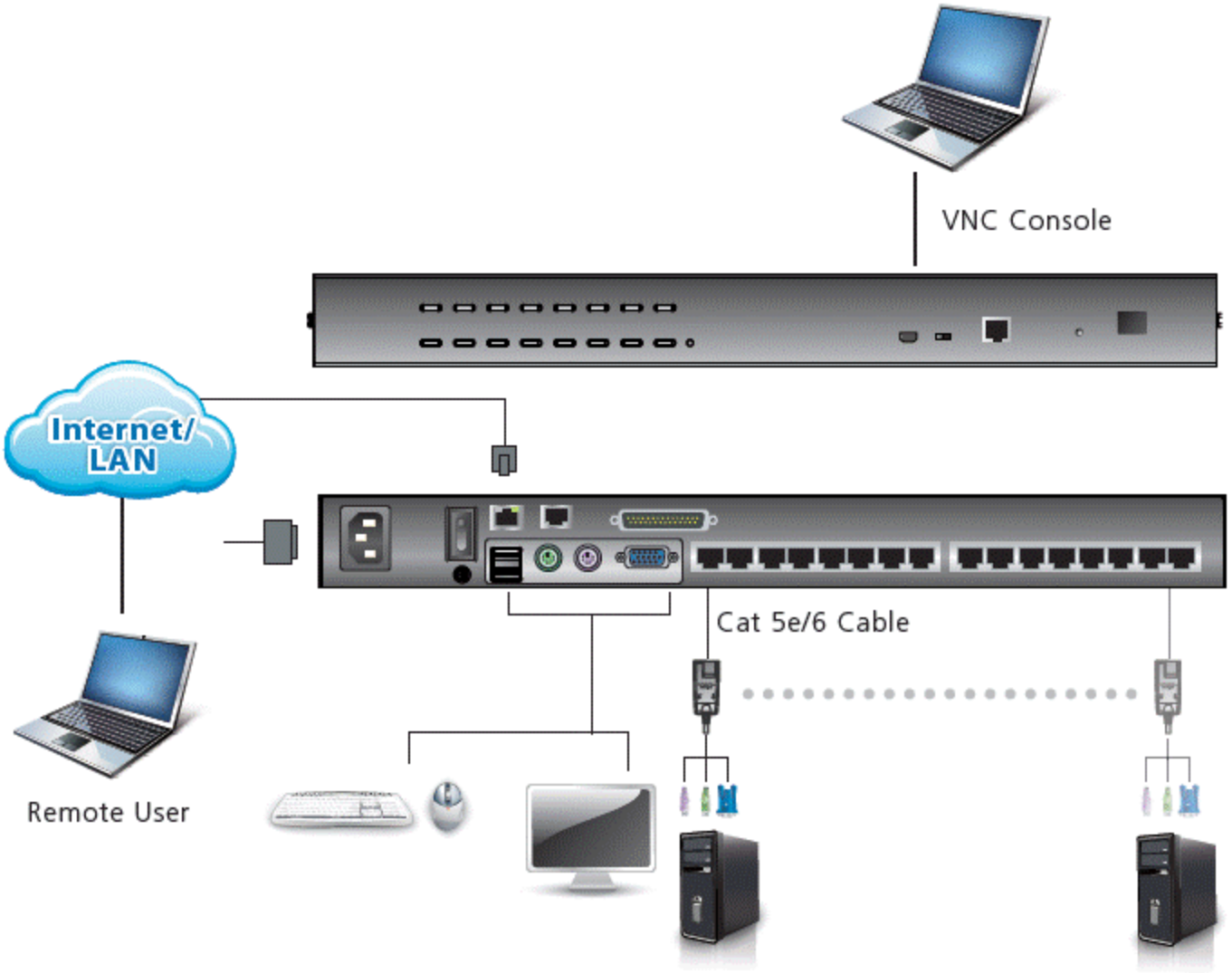
Connection Diagram – KH1516Ai



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CPU Modules for KH Series

- KA7120/7520
  - For PS/2 Interface Computers
- KA7920
  - For PS/2 Interface computer with 4.5M Cat5 cable
- KA9130
  - For Sun machine with mini-DIN8 (Keyboard/mouse) and 13W3 (VGA) Interface
- KA9140
  - For VT100 Terminal Server/IT Device
- KA7170/7570
  - For USB Interface Computers (all platforms)
- KA7970
  - For USB interface computer with 4.5M Cat5 Cable

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ALTUSEN High-Density KVM Switch

- Support multiplatform server environment (PS/2, USB, Sun and Serial)
- Superior Video Quality
  - up to 1600 x 1200 @ 60Hz at up to 40M with KA7xxx CPU modules
  - up to 1280 x 1024@ 75Hz at up to **50M** with KA7xxx CPU modules
- Supports up to 64 user accounts, 32 concurrent user logins
- Daisy chain up to 31 additional units and control up to 256/512 servers
- A dedicated USB port for VNC Console Operation
- 2 - level (Administrator/User) password security
- Integration with ALTUSEN CC2000 management Software

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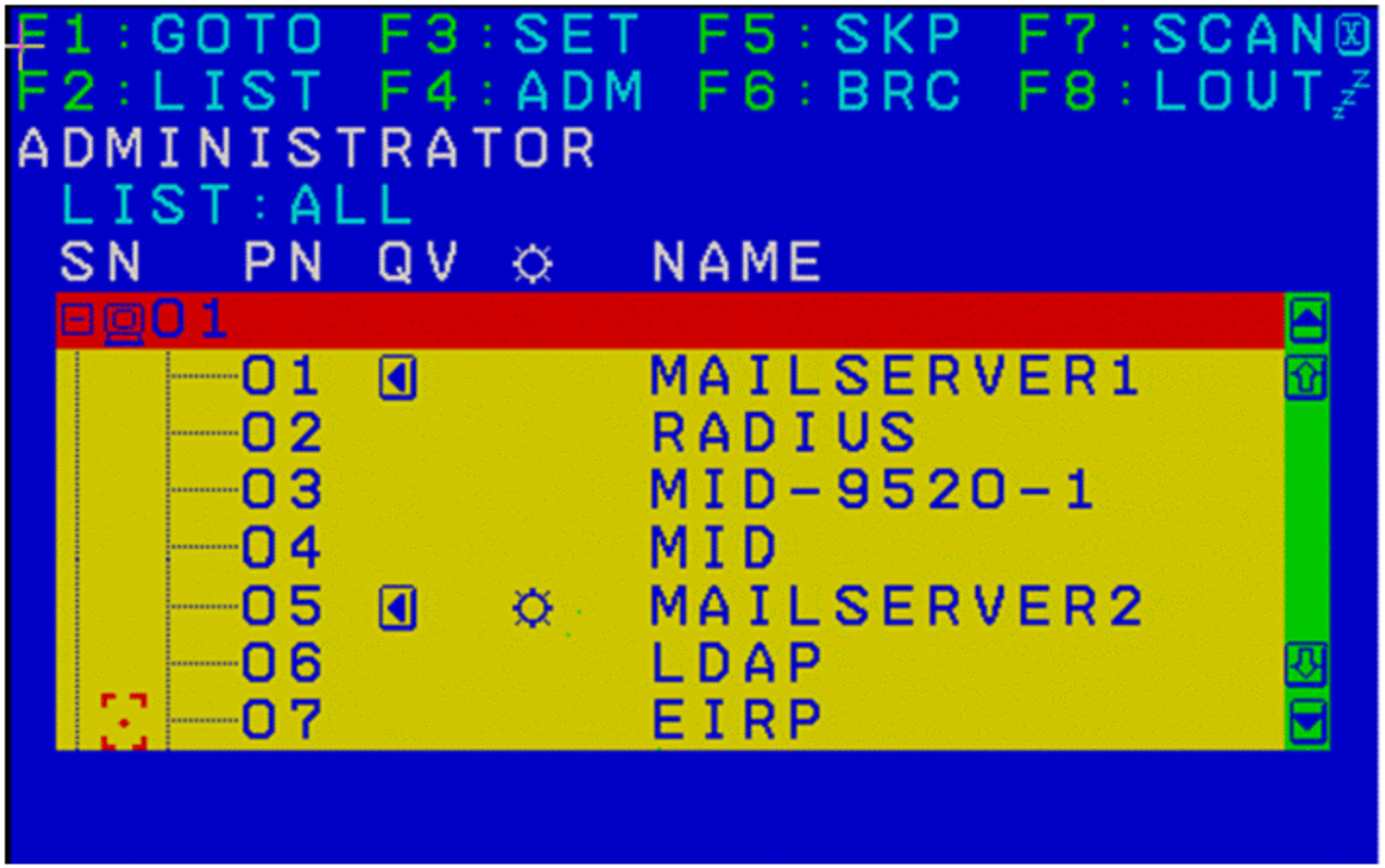
Management Console

Local-OSD



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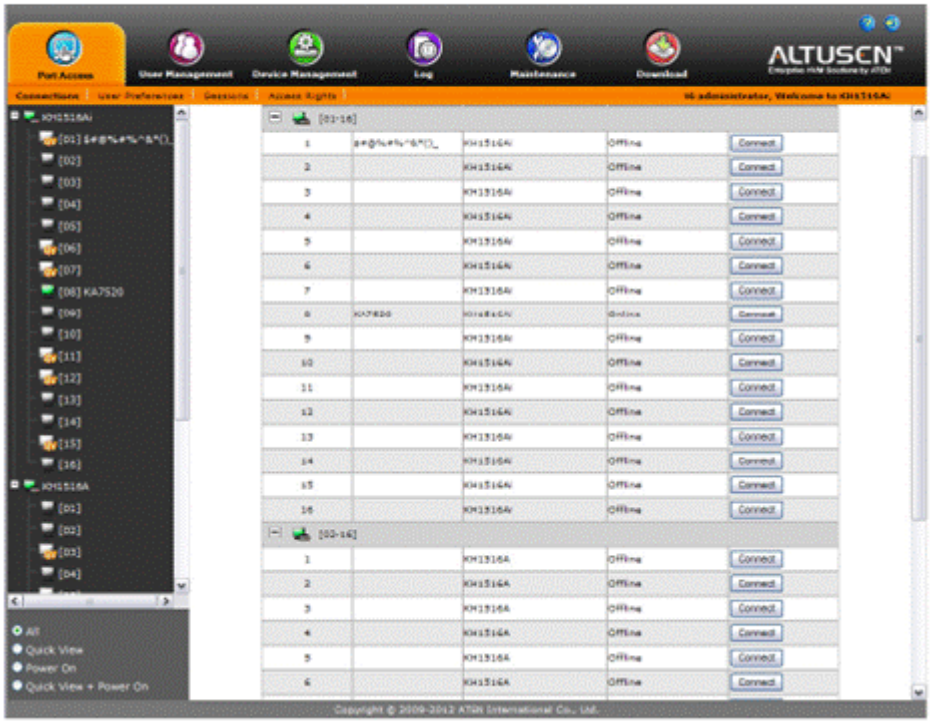
Management Console

Web Console



Winclient Tool Bar

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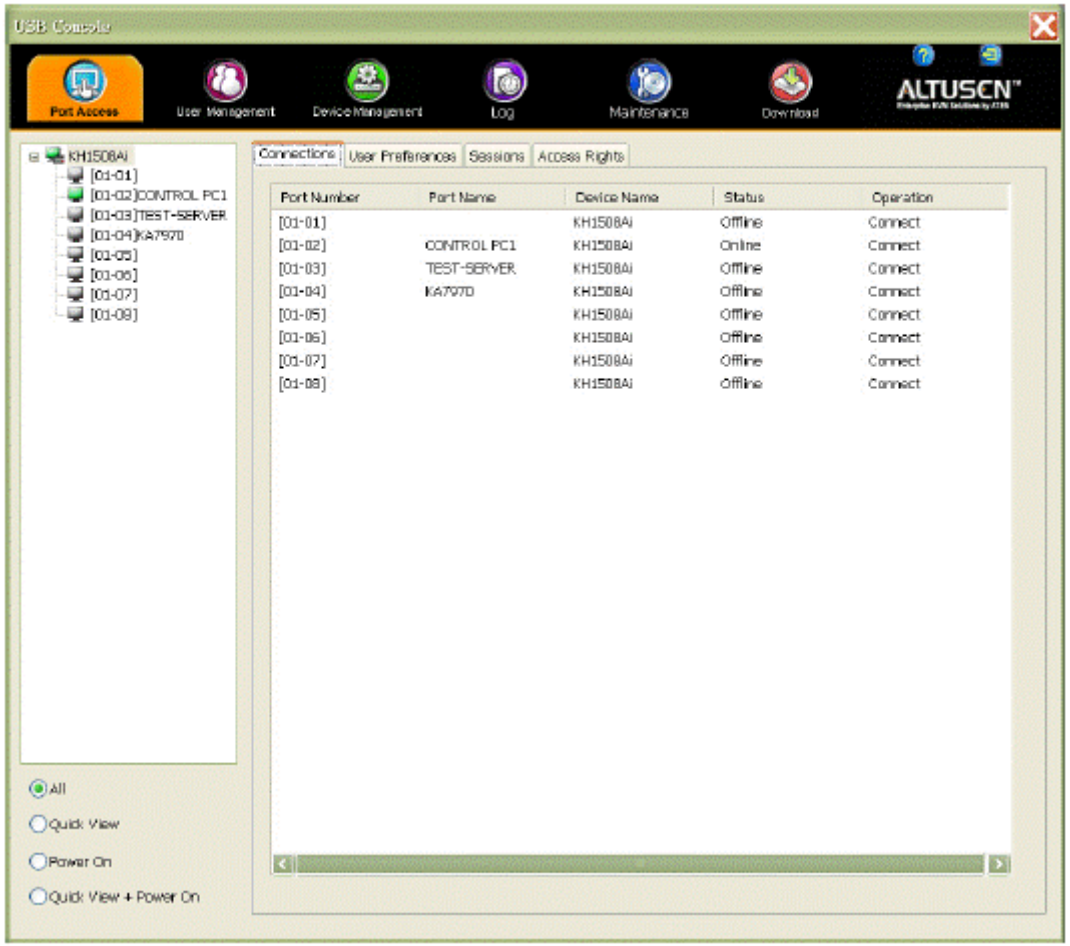
Management Console

GUI of Laptop USB Port at Front Panel



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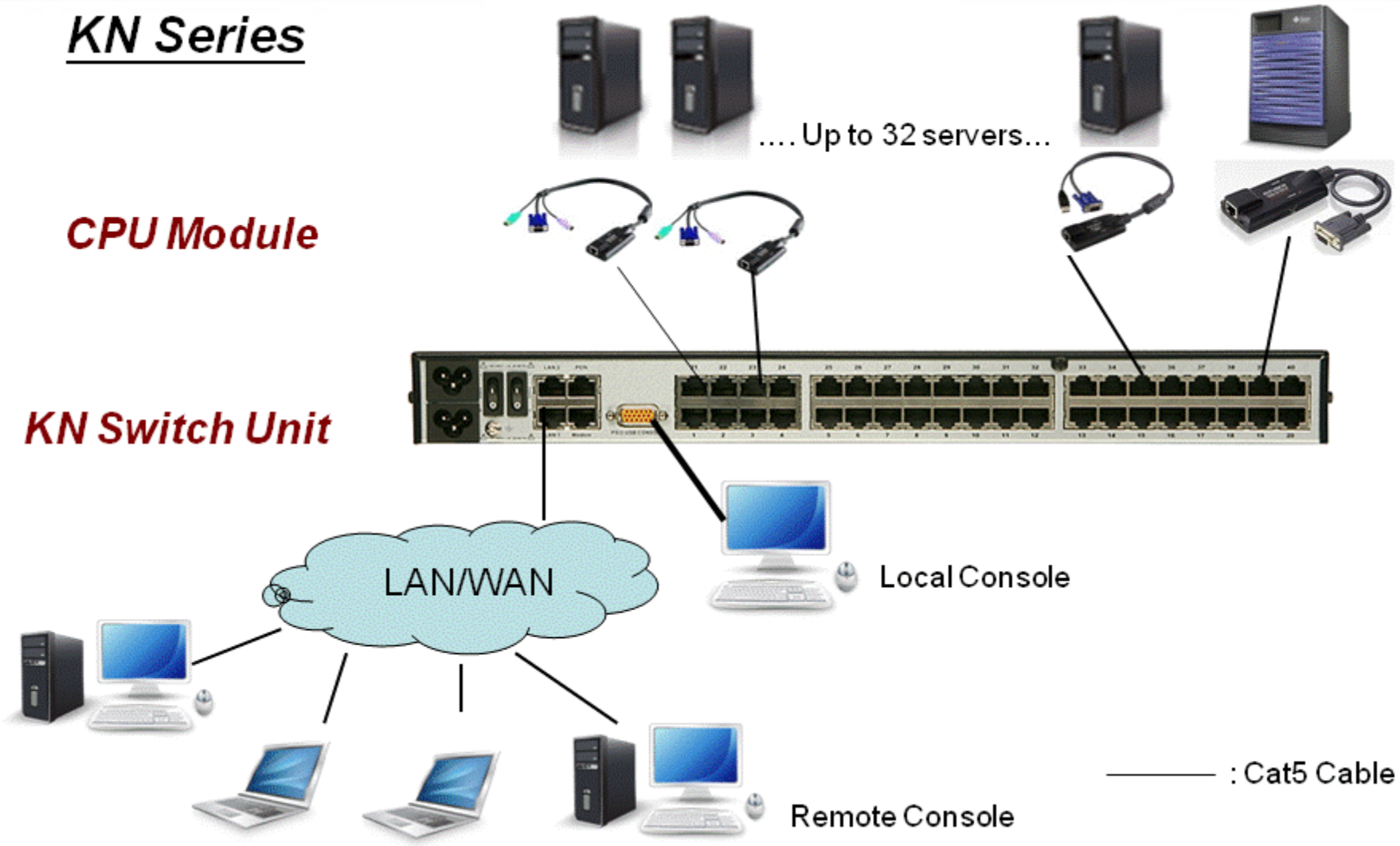
ALTUSEN KVM Over the NET



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KVM Over the NET™ – Switch Units

Model No.	Port	Remote Users	Virtual Media	Dual Power	Console Port	Fan Control	Audio
KN2116A	16	2			PS2, USB		
KN2132	32	2			PS2, USB		
KN4116	16	4			PS2, USB		
KN4132	32	4			PS2, USB		
KN2116v	16	2	v	v	PS2, USB	v	v
KN2132v	32	2	v	v	PS2, USB	v	v
KN4116v	16	4	v	v	PS2, USB	v	v
KN4132v	32	4	v	v	PS2, USB	v	v
KN2124v	24	2	v	v	SPHD-18	v	v
KN2140v	40	2	v	v	SPHD-18	v	v
KN4124v	24	4	v	v	SPHD-18	v	v
KN4140v	40	4	v	v	SPHD-18	v	v

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KVM Over the NETTM – CPU Modules

KA7120

For PS/2 Computers

KA7170

For USB Computers

KA7130

For SUN Legacy

(mini-DIN8+13W3 (VGA))

KA7140

For serial devices

Support 300m

KA7175

Support Virtual Media

KA7176

Support Virtual Media + Audio

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KN4132v Appearance

Front

Rear

Models:

KN2116v 2 (IP users) x 16 (Computers)

KN2132v 2 (IP users) x 32 (Computers)

KN4116v 4 (IP users) x 16 (Computers)

KN4132v 4 (IP users) x 32 (Computers)

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KN4140v Appearance

Front

Rear

Models:

KN2124v	2 (IP users) x 24 (Computers)	KN2140v	2 (IP users) x 40 (Computers)
KN4124v	4 (IP users) x 24 (Computers)	KN4140v	4 (IP users) x 40 (Computers)

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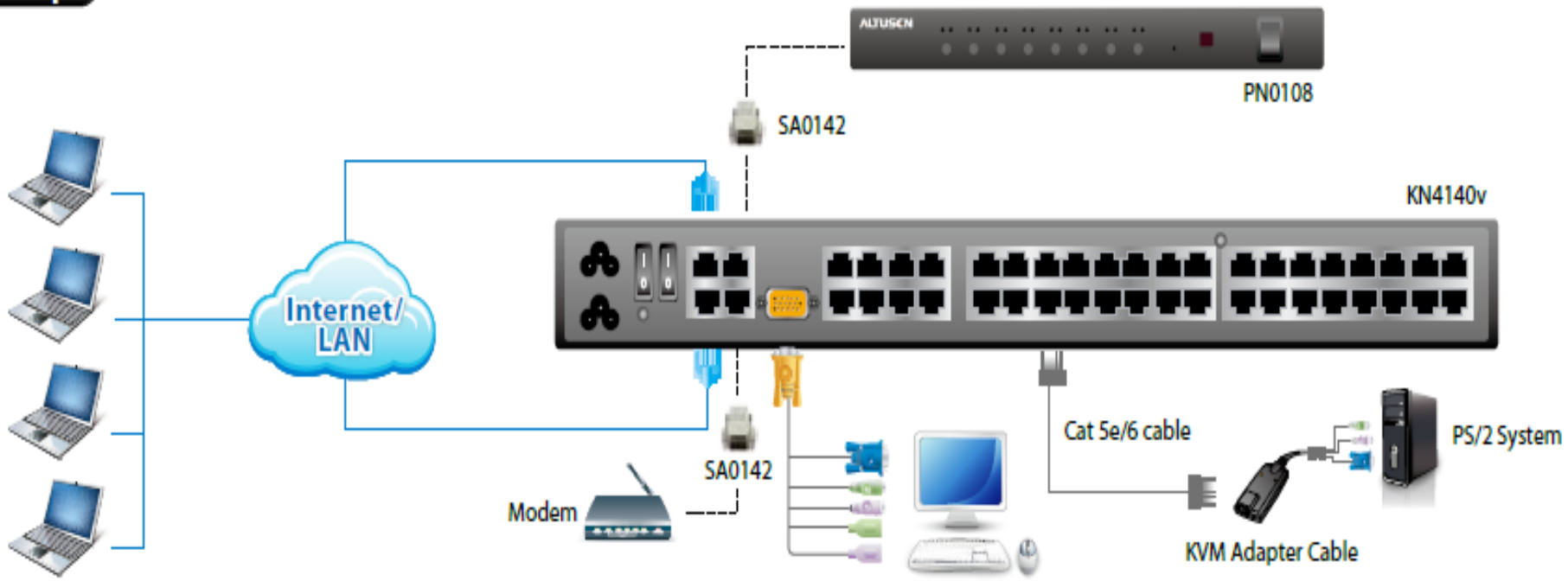
Connection Diagram

KN2124v / KN2140v / KN4124v / KN4140v

Setup



4 remote buses – 4 remote consoles can simultaneously access separate ports – up to 32 users can share the remote buses.

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KVM Over the NET™

KN2116v/ KN2132v/ KN4124v/ KN4132v
KN2124v/ KN2140v/ KN4124v/ KN4140v

KN4140v

- Blade server support *New!*
- IPv6 capable *New!*
- Modem Dial in/out/back function *New!*
- **Panel Array Mode available to both local and remote users *New!***
- **Audio enables multimedia application**
- **High Video resolution-**
  - **up to 1600x1200@60Hz, 32bits color depth for the local**
  - **up to 1600x1200@60Hz, 24bits color depth for the remote**
- **Server can be located 50M away from KVM Switch**
- **Fan speed adjusts according to temperature(4 sensors/6 fans)**
- **Message Board**
- Virtual Media for system installation or patches
- Dual NICs for redundant LAN or two IP operation
- Integrated with Altusen CC2000 Management Software

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Major Features

- Multi-platform (PS/2, USB, Sun, Serial)
- Multiple sessions, Concurrent Access
- Single-level Cascadable
- User & Group Permission
- Access Mode – Share, Occupy, Exclusive
- Message Board
- Panel Array Mode (Local & Remote client)
- Mouse DynaSync (USB CPU Module)
- IPV6 Support

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Major Features

- Blade Server Support
- Dual Network Cards / Dual Power
- Adapter ID
- Virtual Media
- ★ Green IT – Variable Fan Speed
- Audio Enable (KA7176)
- Power Over the NET Support
- Magic Panel
- Exit Macro

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Major Features

- Event log and Windows-based Log Server
- Critical system events sent by email and SNMP Trap
- OOBC (modem dial-in, dial-back, dial-out support)
- Advanced Password Policy
- Third-party Authentication – RADIUS, LDAP(S), AD
- Flexible encryption
- IP / Mac Filter

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KVM Over the NET™

KN2116A / KN2132 / KN4116 / KN4132

- Blade server support ***New!***
- IPv6 capable ***New!***
- **Panel Array Mode available to both local console and remote users *New!***
- **High Video resolution-**
  - **up to 1600x1200@60Hz, 32bits color depth for the local**
  - **up to 1600x1200@60Hz, 24bits color depth for the remote**
- Dual NICs for redundant LAN or two IP operation
- **Mouse DynaSync** for USB mice – automatically synchronizes local and remote mouse movements for perfect alignment of mouse pointers
- KB/Mouse Broadcast – KB/Mouse input can be duplicated on all the attached servers
- **Integrated with Altusen CC2000 Management Software**

KN4132

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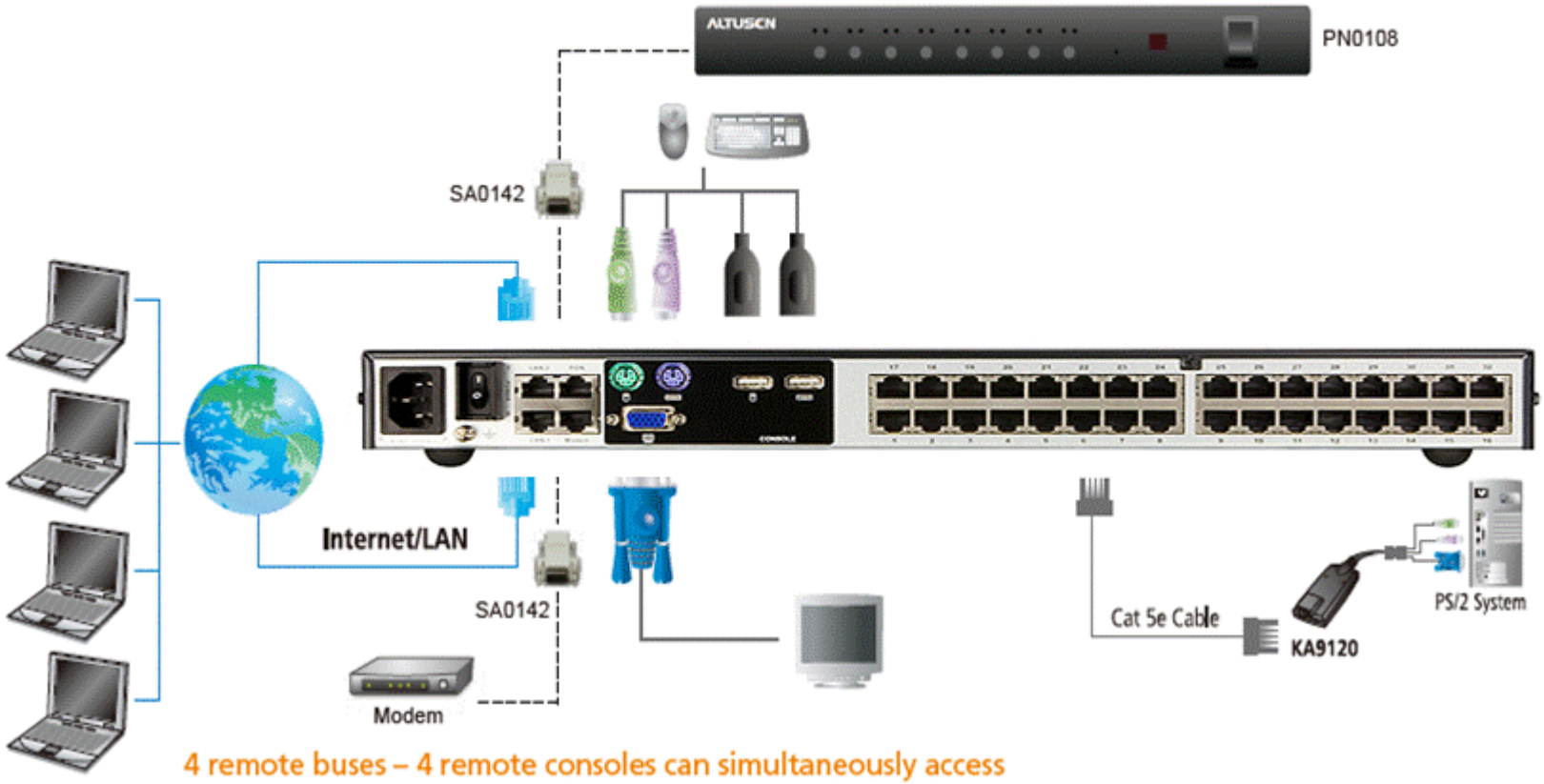
Connection Diagram

KN2116A / KN2132 / KN4116 / KN4132



4 remote buses – 4 remote consoles can simultaneously access separate ports – up to 32 users can share the remote buses.

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Application Studies & Successful Stories

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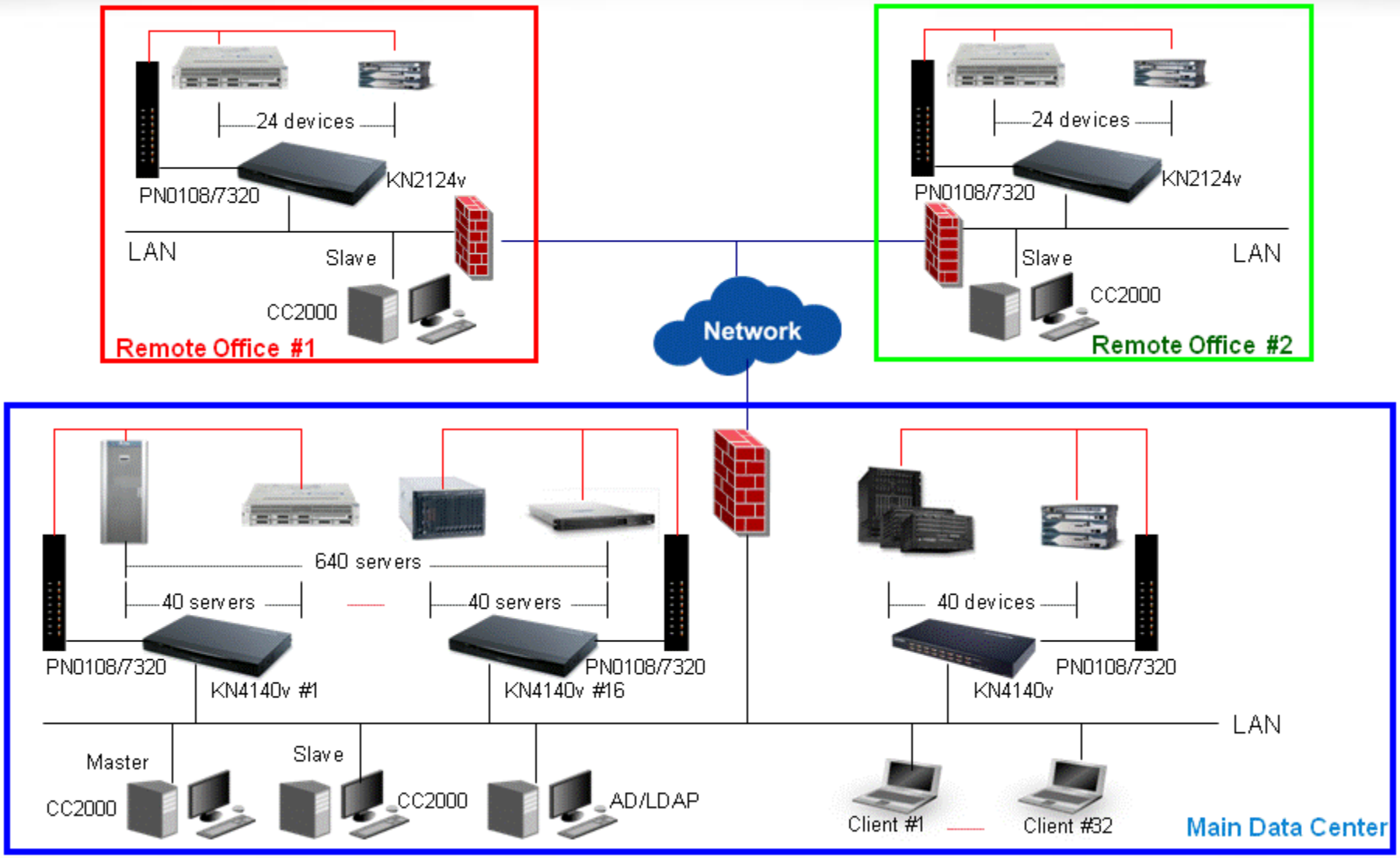
Application - Data Center Management



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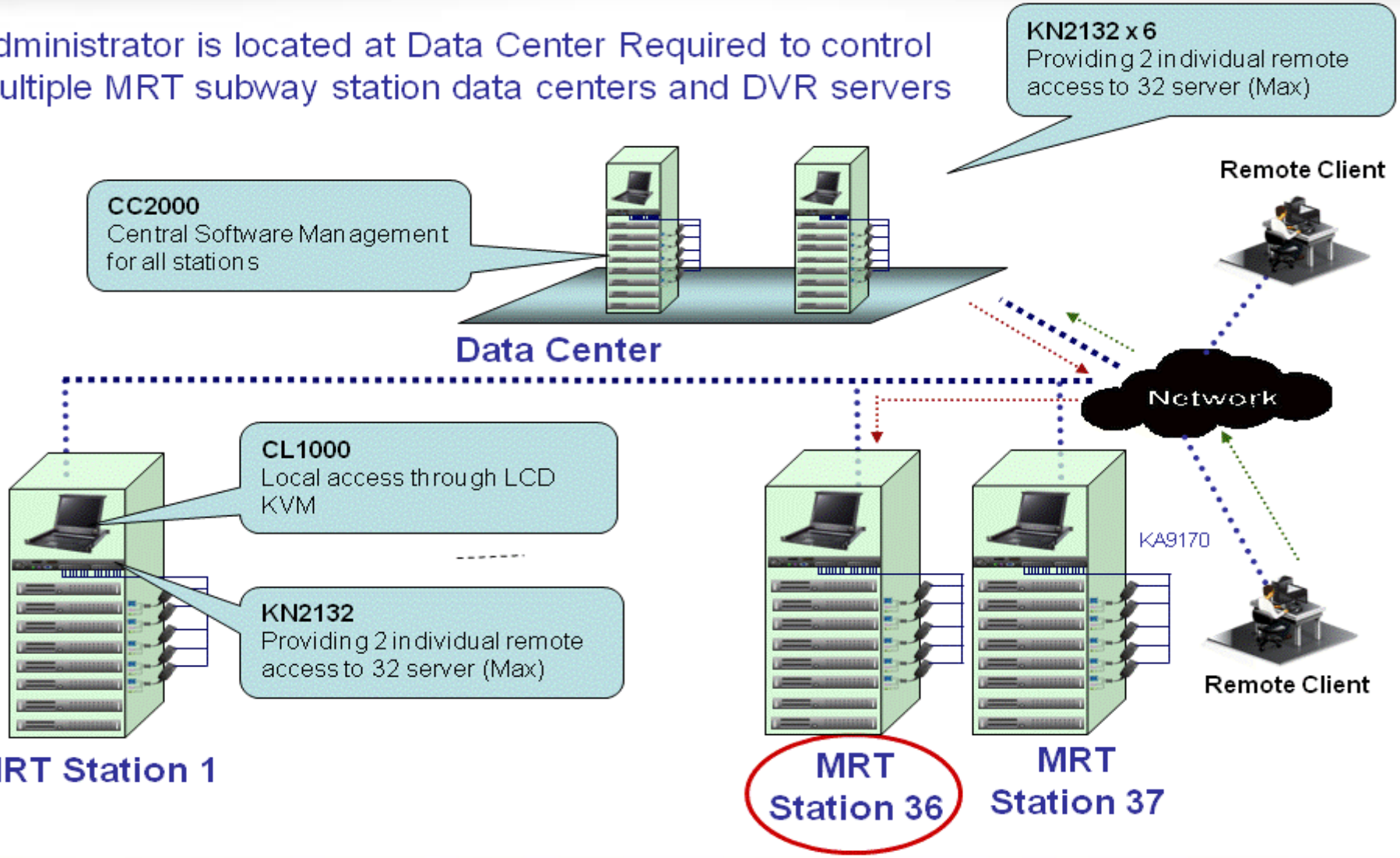
Successful Story 1- Subway System

Administrator is located at Data Center Required to control multiple MRT subway station data centers and DVR servers



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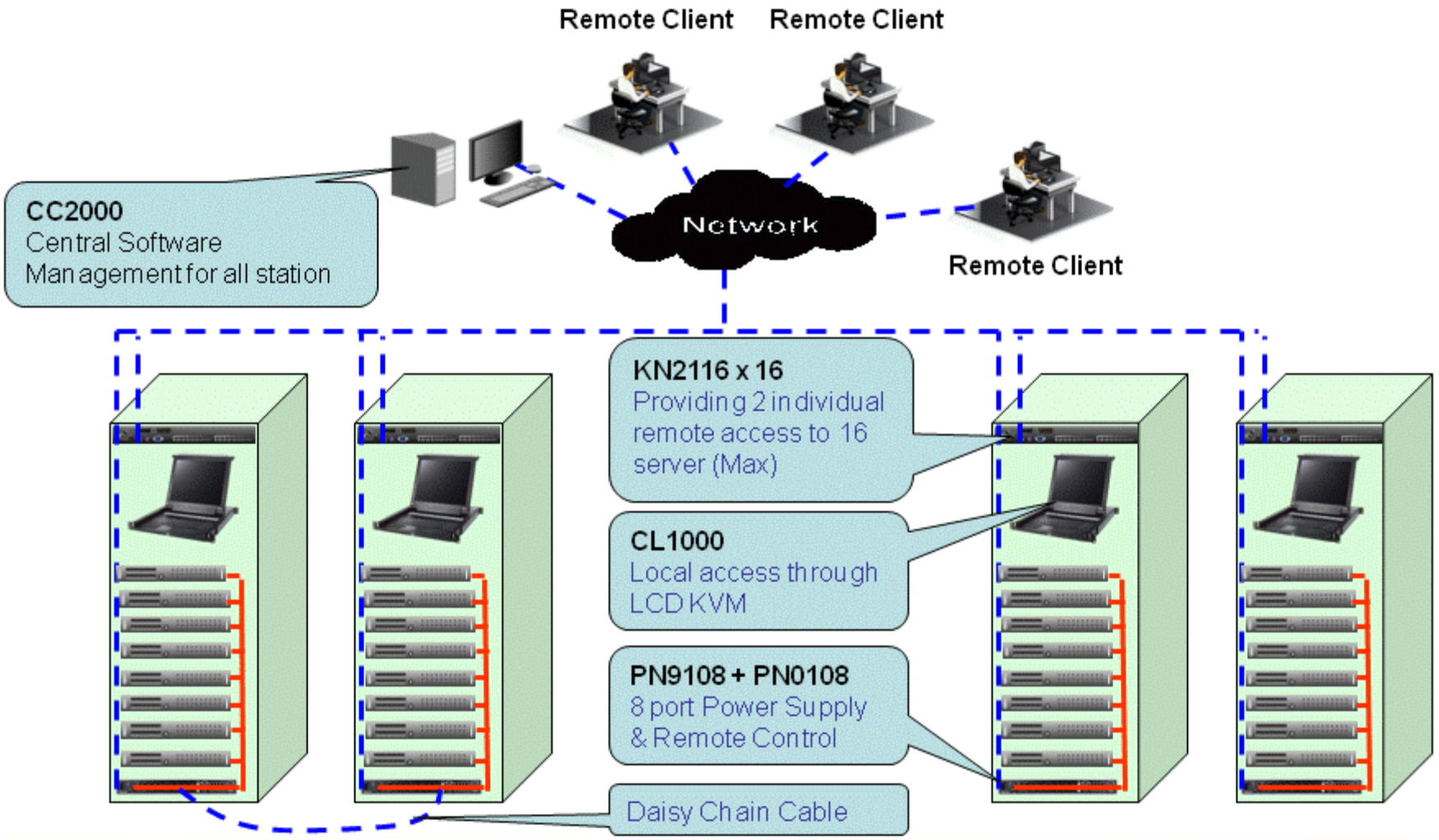
Successful Story 2 – Telecom

Over IP KVM/Power Access with Management Software for 256 servers



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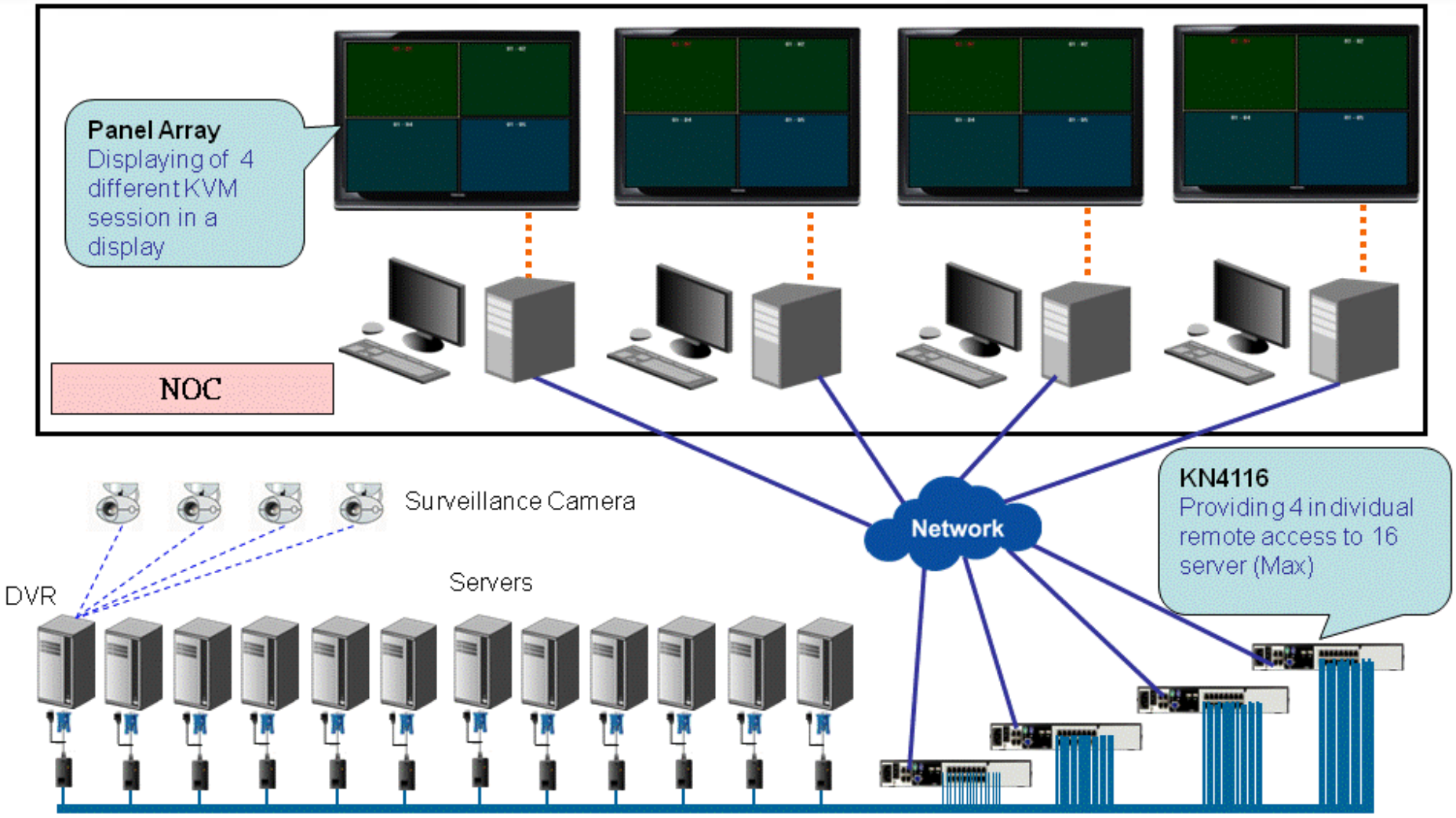
Successful Story 3 - Telecom



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Successful Story 4 - Banking

- **Customer:**

  An Binh Bank (ABBANK), Vietnam

- **Challenges:**

  - Increase the speed of access and operations with both remote control and simpler management
  - Integrate 90+ servers and network devices in one control environment and reduce time and costs
  - Provide complete remote control capability for all servers and network devices

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Successful Story - Banking

- **ATEN Solution:**
  - KN4132 32-Port KVM Over the NET ™
  - SN0108 8-Port Serial Over the NET
  - CC2000 Control Center Over the NET

- **Benefits:**
  - An environment facilitating operational ease and speed for two Data Centers including more than 90 severs
  - Reduced costs
  - Reduced working time of IT staff
  - Increased comfort of use
  - Ensuring a high security level

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Successful Story 5 - Insurance

- **Customer:**
  China Life Insurance, Taiwan

- **Challenges:**
  - The increase in the number of servers increases the complexity of cabling and server room clutter
  - Server administration requires multiplatform support
  - Distance constraints between the consoles and servers meant administrators required frequent access to the data center
  - Global epidemics means data centers need remote administration to provide continuity of service

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Successful Story - Insurance

- **ATEN Solution:**
  - KN4116 16-port KVM Over the NET™
  - KH1516 16-port Cat 5 High Density KVM Switch

- **Benefits:**
  - Multiple sessions and high stability offers comprehensive remote access capability
  - Strong security and user-friendly management interface simplifies management
  - Multiplatform Support and Superb System Compatibility
  - Cat5e is easy to cable and extends transmission range

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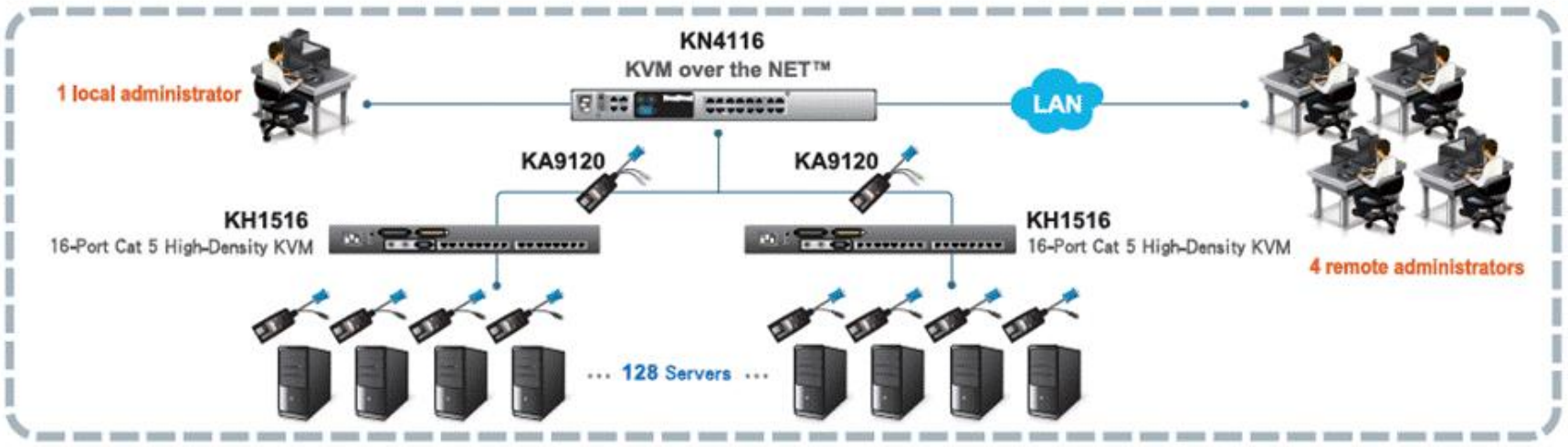
Successful Story - Insurance



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Competitor – Avocent DSR Series

- ***Switch Models***

Model	Users	Ports	Key Features
DSR1024 (CN8000)	1 local/ 1 remote	1	single AC
DSR1031	1 local/ 1 remote	8	Virtual media/single AC
DSR1030	1 local/ 1 remote	16	Virtual media/single AC
DSR2030 (KN2124v)	1 local/ 2 remote	16	Virtual media/single AC
DSR2035 (KN2140v)	1 local/ 2 remote	32	Virtual media/single AC or Dual AC
DSR4030 (KN4124v)	1 local/ 4 remote	16	Virtual media/single AC
DSR8030	1 local/ 8 remote	16	Virtual media/single AC
DSR8035	1 local/ 8 remote	32	Virtual media/single AC

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Competitor – Avocent MPU Series

MergePoint Unity Switch

- Each Port would be used for KVM or Serial connectivity.
- Virtual media enables remote USB connections and support for smartcard/CAC readers

Model	Users	Ports	Key Features
MPU104E	1 local/ 1 remote	4	Virtual media/single AC
MPU108E	1 local/ 1 remote	8	Virtual media/single AC
MPU1016	1 local/ 1 remote	16	Virtual media/single or Dual AC
MPU2016 (KN2124v)	1 local/ 2 remote	16	Virtual media/single or Dual AC
MPU2032 (KN2140v)	1 local/ 2 remote	32	Virtual media/single or Dual AC
MPU4032 (KN4140v)	1 local/ 4 remote	32	Virtual media/single or Dual AC
MPU8032	1 local/ 8 remote	32	Virtual media/single or Dual AC

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Competitor – Avocent MPU Series

CPU Modules

DSRIQ-PS2
(KA7120)

DSRIQ-USB
(KA7170)

DSRIQ-VSN
(for 13W3 video, Sun K/M)
(KA7130)

DSRIQ-SRL
(for VT100 Serial device)
(KA7140)

DSAVIQ-PS2M
(VM /14 inches cable)

DSAVIQ-USB2
(VM /14 inches cable)

DSRIQ-PS2L
(VM /20 inches cable)

DSAVIQ-USB2L
(VM /20 inches cable)

MPUIQ-SRL
(KA7140)

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Competitor – Avocent DSR Series

- Multibrowser support (IE, Mozilla Firefox, Netscape)
- Multiplatform client support (Windows, Mac OS X, Linux, Solaris)
- Scalable video sessions
- User access control
- Local log in for increased security
- Individually selectable keyboard, mouse, video and virtual media encryption (DES, 3DES, 128bit SSL, AES)
- video resolutions supported up to 1280 x 1024 for remote users and up to 1600 x 1200 for local users via the video port
- optional support for managing intelligent power devices
- virtual media capability accessed through USB ports

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Competitor – Raritan Dominion KXII

- Switch Models

Remote Users over the Network	64 Ports	32 Ports	16 Ports	8 Ports	1 Port
8*	KX II-864	KX II-832			
4*	KX II-464	KX II-432	KX II-416		
2*		KX II-232	KX II-216		
1*		KX II-132	KX II-116	KX II-108	KX II-101

KXII-101 (CN8000)

KXII-108 (KH1508i)

KXII-116/216/416
(KH1516Ai/KN2116A/4116/2124v/4124v)

KXII-132/232/432/832
(KN2132/KN4132/2140v/4140v)

KXII-464/864

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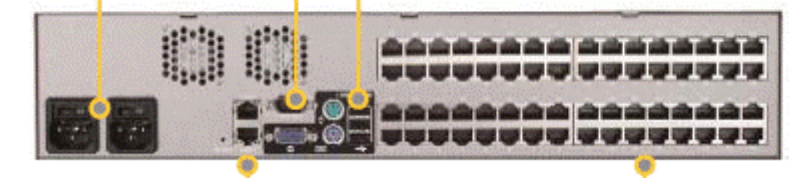
Competitor – Raritan Dominion KXII

DKX2-432 shown

KXII-464/864



DKX2-464 shown

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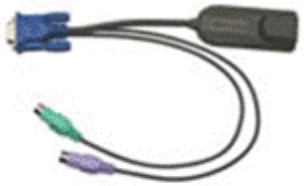
Raritan DCIM



D2CIM-PS2
CIM for PS/2 port
(KA7120)

D2CIM-VUSB
USB CIM required for virtual media and absolute mouse synchronization
(KA7175)

D2CIM-SUN
CIM for SUN ports, HD15 video
(KA7130)

D2CIM-DVUSB
Dual USB CIM for BIOS Virtual Media and Absolute Mouse Synchronization

D2CIM-PWR
CIM for Remote Power Control (RPC) and Dominion PX. Used with Dominion KX II switches only.

D2CIM-USBG2
CIM for USB and SUN keyboard and mouse.
(KA7170)

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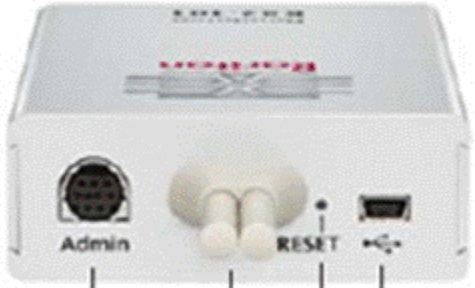
Competitor – Raritan Dominion KXII

KXII –101 : Single Port KVM-over-IP switch



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Competitor – Raritan Dominion KXII

- Universal Virtual Media™ on all models to remotely install OS and software
- Absolute Mouse Synchronization™
- Dual power and dual Gigabit Ethernet with automatic failover
- Support for IBM, HP and Dell Blade Servers
- Tiered (cascaded) local and remote access of up to 1024 servers
- Support of Smart Card/Common Access Card (CAC)
- FIPS 140-2 validated cryptographic module for enhanced encryption and security
- PC Share mode lets up to eight users remotely access the same server for collaborative troubleshooting
- Firmware upgradeable over IP network connection Supports Windows, Mac, Linux and Solaris platforms
- Configurable Strong Password Checking; Group and port-level permissions
- RADIUS and LDAP and Active Directory Authentication
- Remote Power Control- multi-function serial port that can be used to connect Raritan intelligent PDU, the Dominion PX
- SNMP Management and Syslog
- Centralized management with Raritan CommandCenter Secure Gateway

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ATEN KN Series Unique Features

- Panel Array Mode available to both local and remote users
- Audio enables multimedia application
- High Video resolution-
  - up to 1600x1200@60Hz, 32bits color depth for the local
  - up to 1600x1200@60Hz, 24bits color depth for the remote
- Server can be located 50M away from KVM Switch
  - with KA7xxx series CPU modules
- Fan speed adjusts according to temperature
- Message Board

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Thank You!

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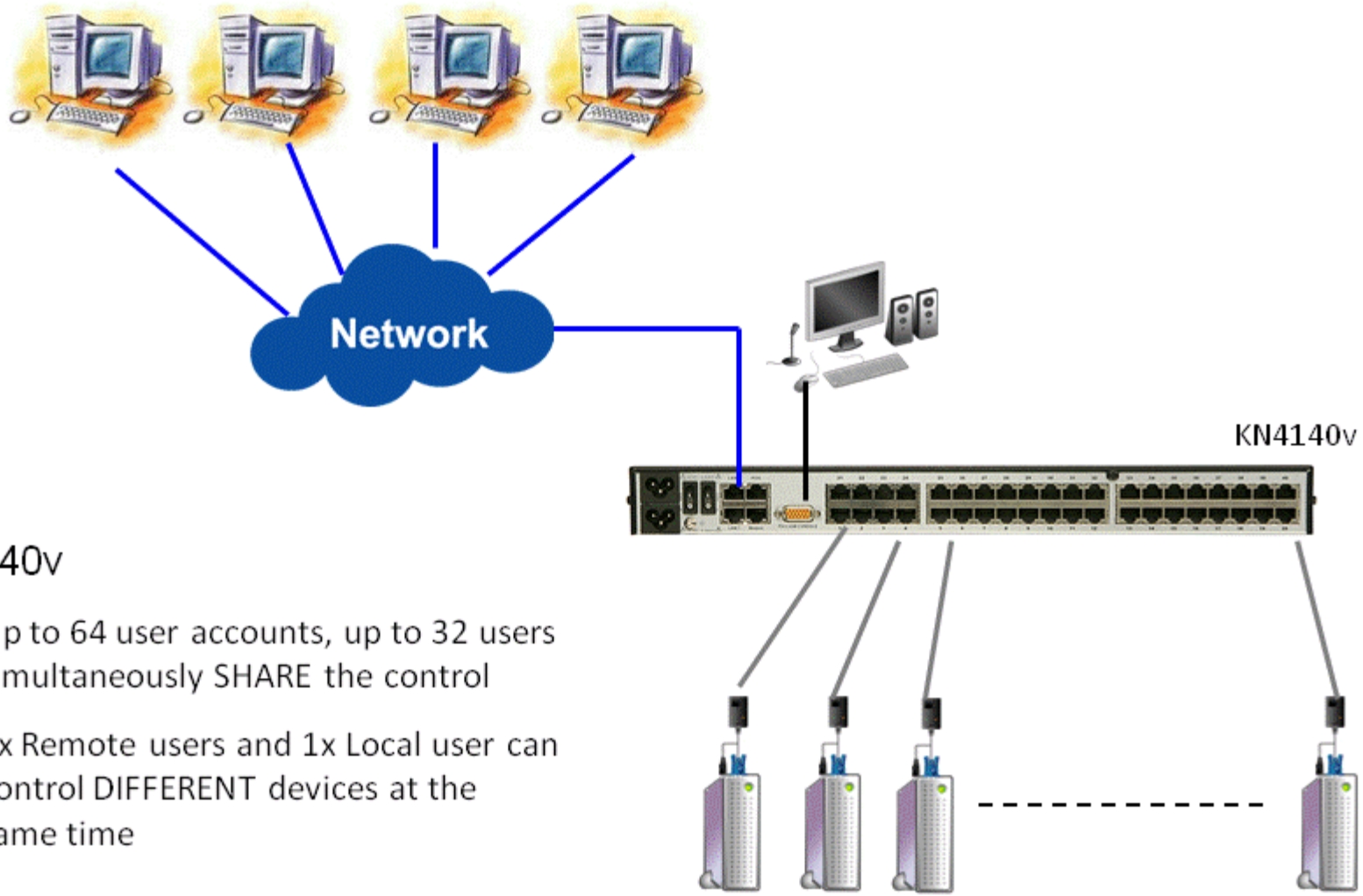
Multiple sessions, Concurrent Access



KN4140v

1. Up to 64 user accounts, up to 32 users simultaneously SHARE the control
2. 4x Remote users and 1x Local user can control DIFFERENT devices at the same time

Complete

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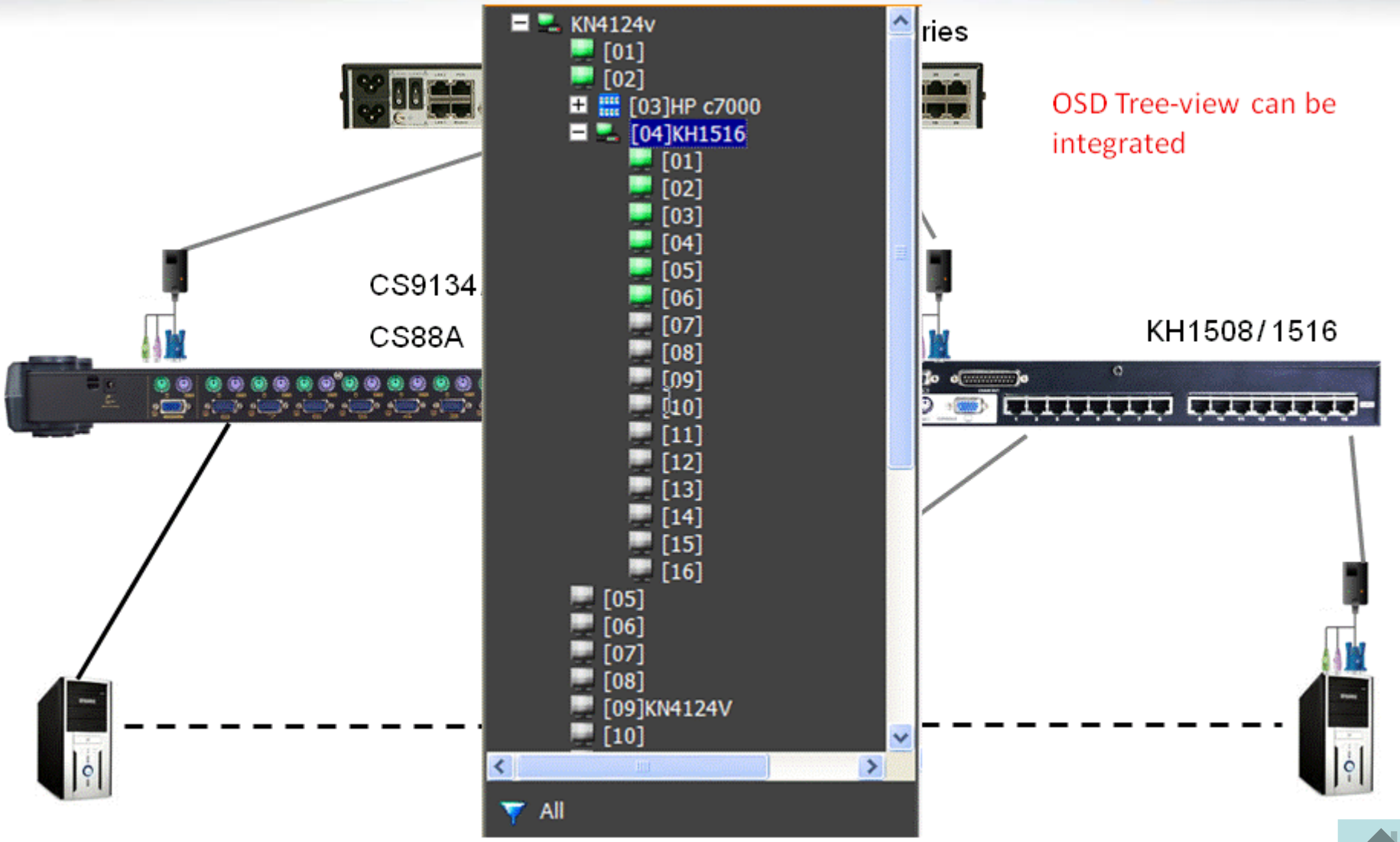
Single-level Cascadeable



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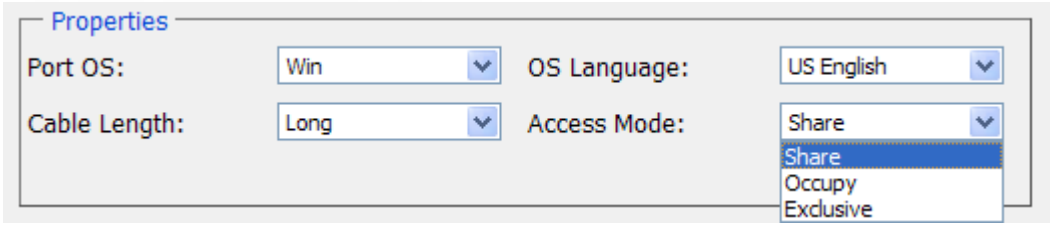
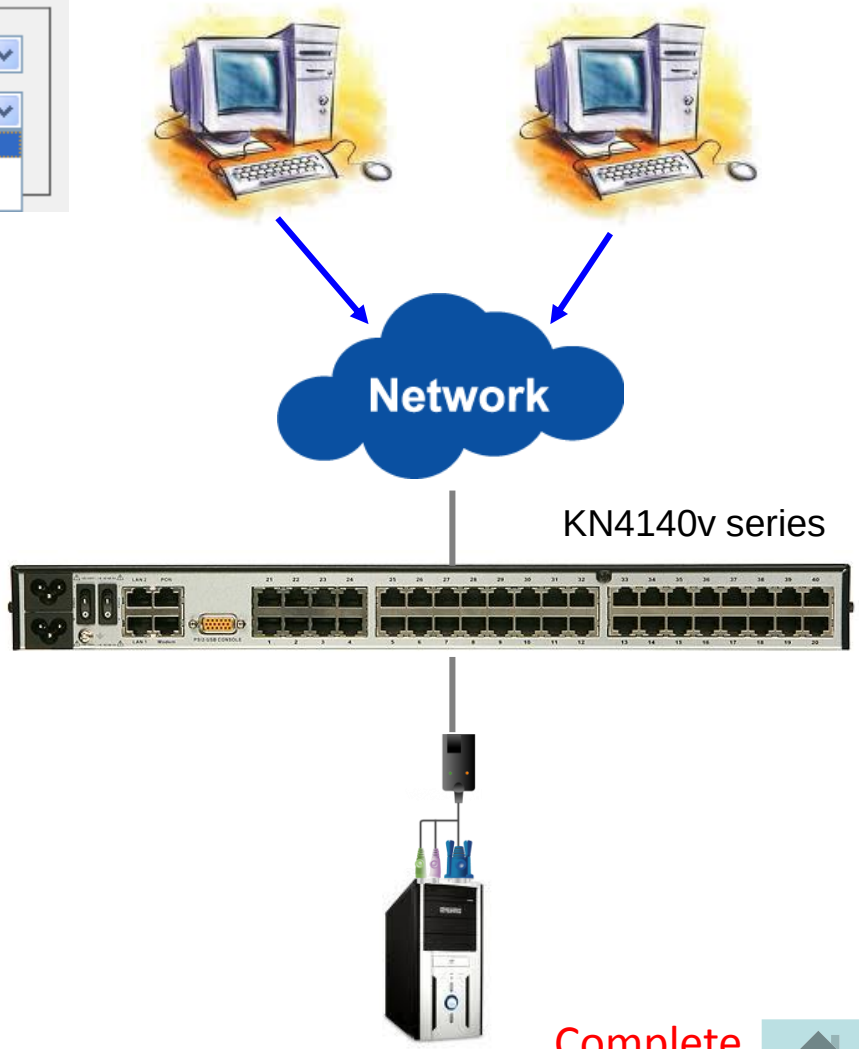
Access Mode



Access Mode	K	V	M
Share	O	O	O
Occupy	X	O	X
Exclusive	X	X	X



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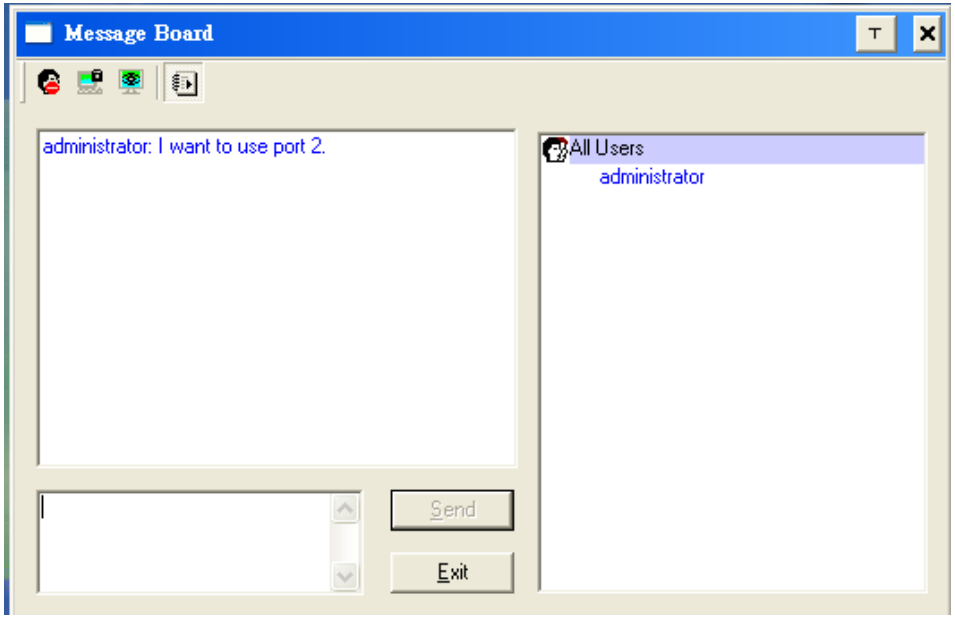
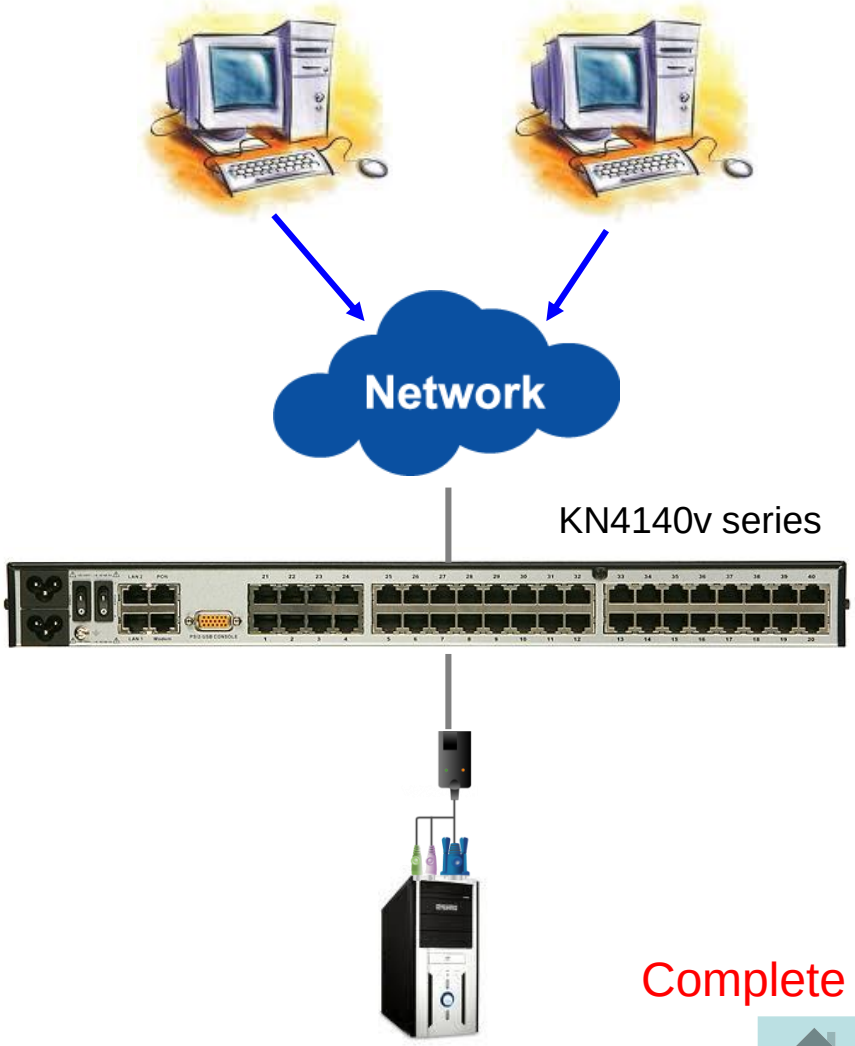
Message Board





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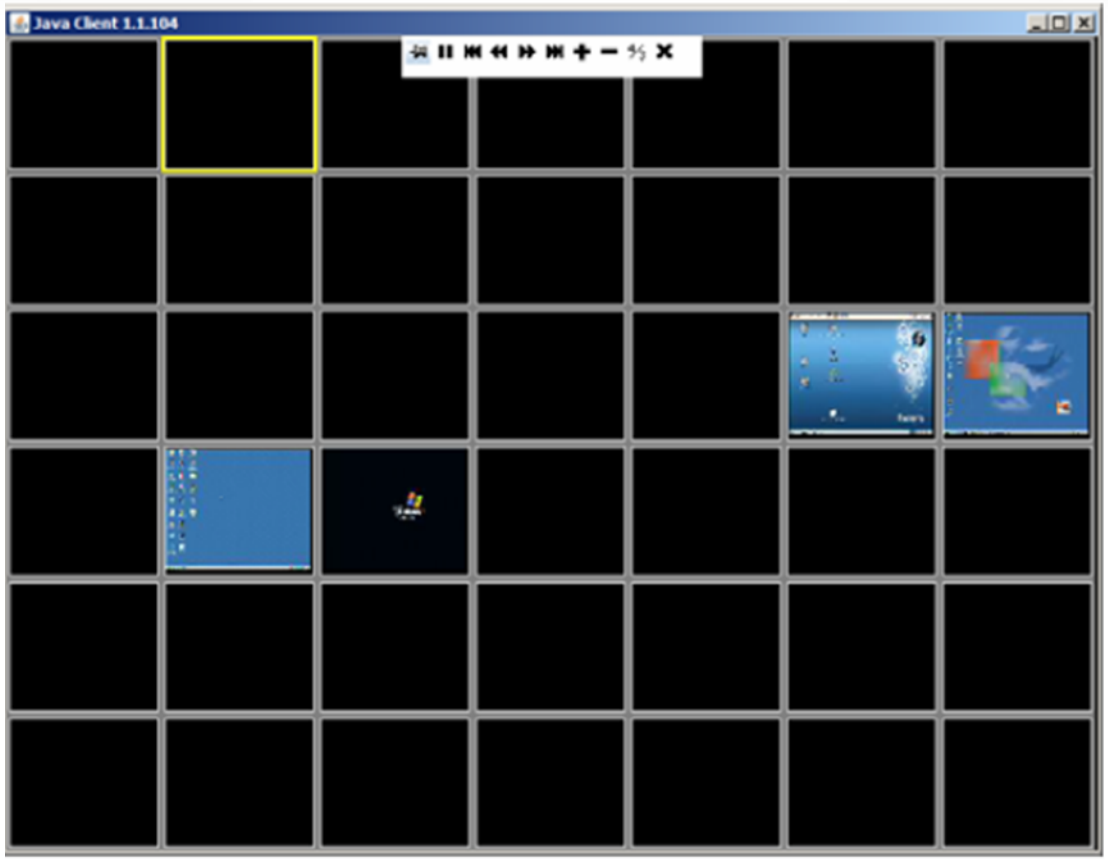
Panel Array Mode



KN4140v series support Panel Array Mode for both Local and Remote client.

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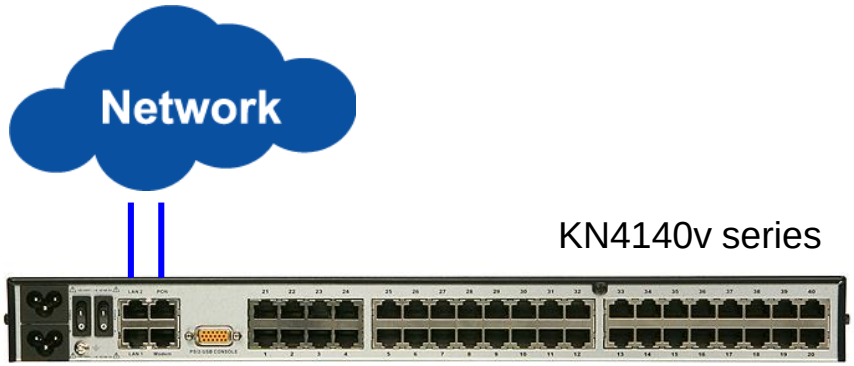
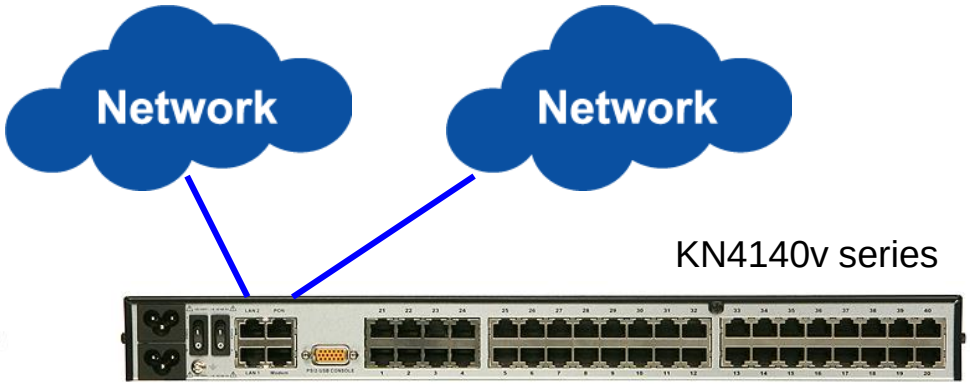
Network Card Access Modes

Redundant LAN



Single IP

Dual NIC Access



Dual IP

Complete

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Dual Power

PDU

PDU

Link KN4140v's power inlets to different power sources to have power redundancy.

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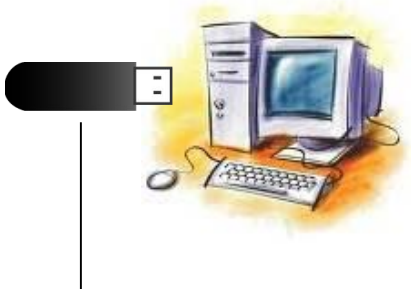
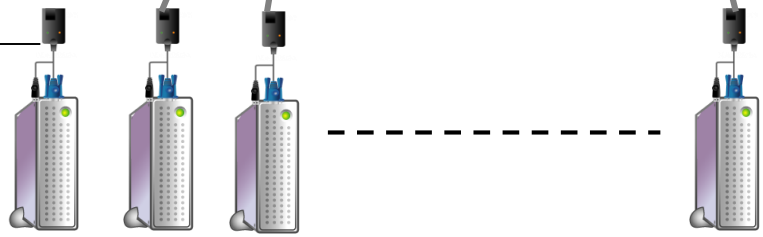
Virtual Media



Support DVD/CD drives, USB mass storage, Hard Drive or ISO images

KA7175 or
KA7176



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Virtual Media

WinClient ActiveX Viewer / WinClient AP

- IDE CDROM/DVD-ROM Drives – Read Only
- USB CDROM/DVD-ROM Drives – Read Only
- IDE Hard Drives – Read Only
- ISO Files – Read Only
- USB Hard Drives – Read/Write
- USB Flash Drives – Read/Write
- USB Floppy Drives – Read/Write
- Folders – Read/Write

Java Applet Viewer / Java Client AP

- ISO Files – Read Only
- Folders – Read/Write

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USB Hard Drives / USB Flash Drives

- These drives can be mounted either as Drives or Removable Disks.
- Mounting them as removable disks allow booting the remote server if the disk contains a bootable OS.
- If the disk contains more than one partition, the remote server can access all the partitions.

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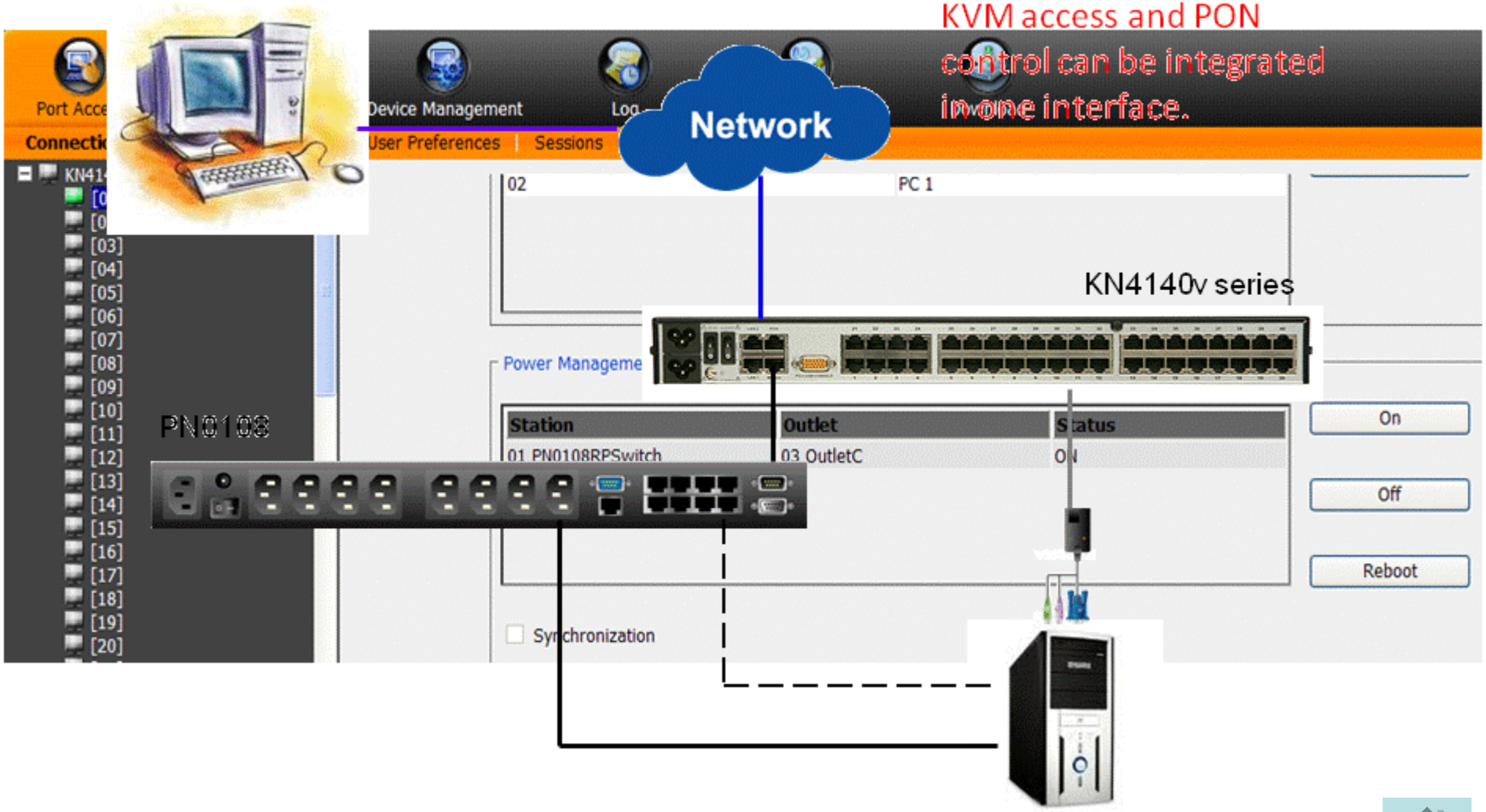
Power Over the NET Support



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Magic Panel

A Toggle	**Zoom**	**Scan Port**
Macros Dialog	**On-Screen KB**	**Array Mode**
Video Options	Mouse Pointer	**Cat5 Cable Length**
Auto-sync	Mouse Sync Mode	**Enter OSD**
Screen Mode	Speaker	Customization
Snapshop	Macro List	Exit
Message Board	**First Port**	Num Lock
Ctrl+Alt+Del	**Previous Port**	Caps Lock
Grayscale	**Next Port**	Scroll Lock
Virtual Media	**Last Port**	

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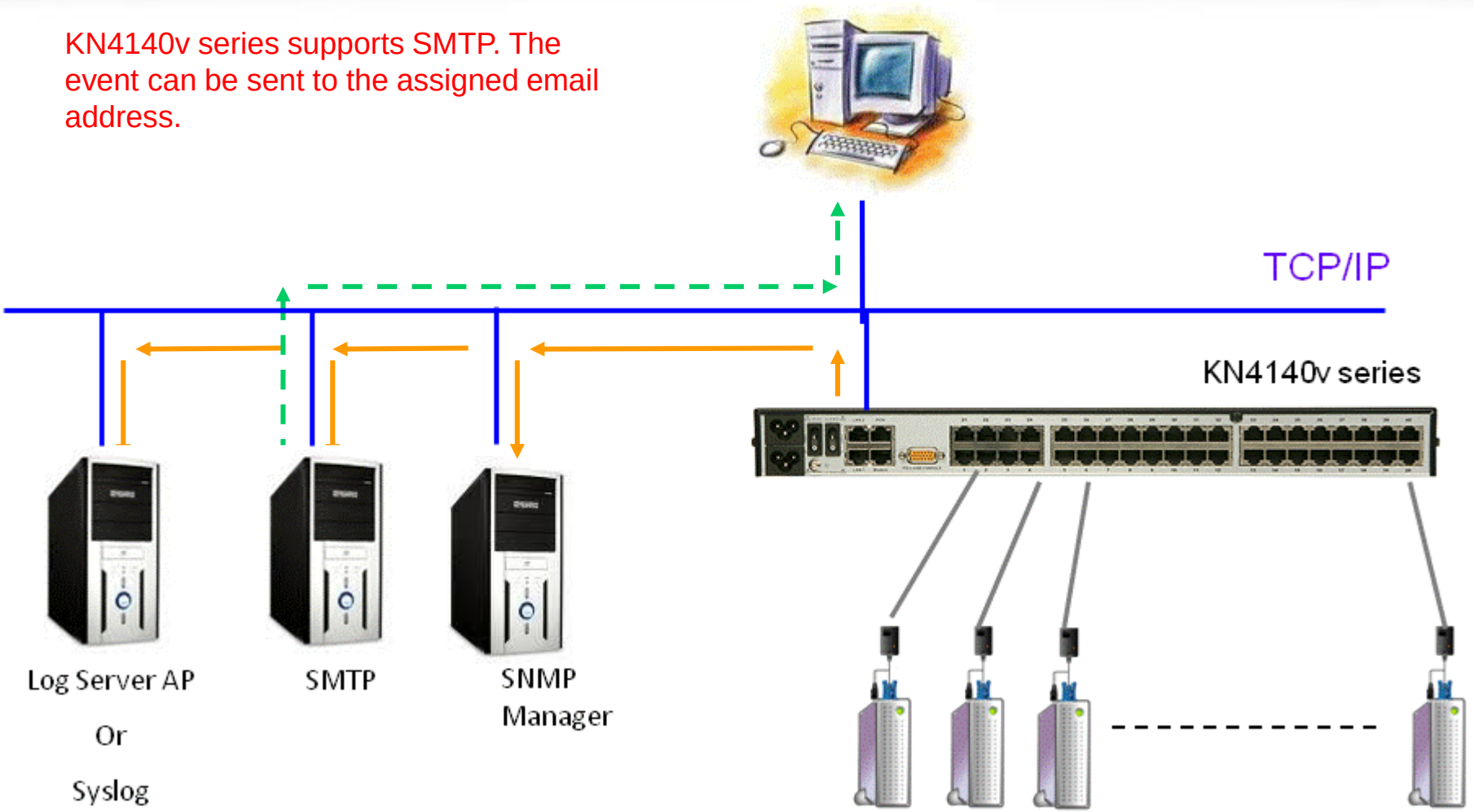
Log Server / SMTP / SNMP Trap

KN4140v series supports SMTP. The event can be sent to the assigned email address.



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Adapter ID

- Stores port information, includes OS, Name, K/B Language, Access Mode
- it’s not required to change cable configuration settings when moving cables from port to port

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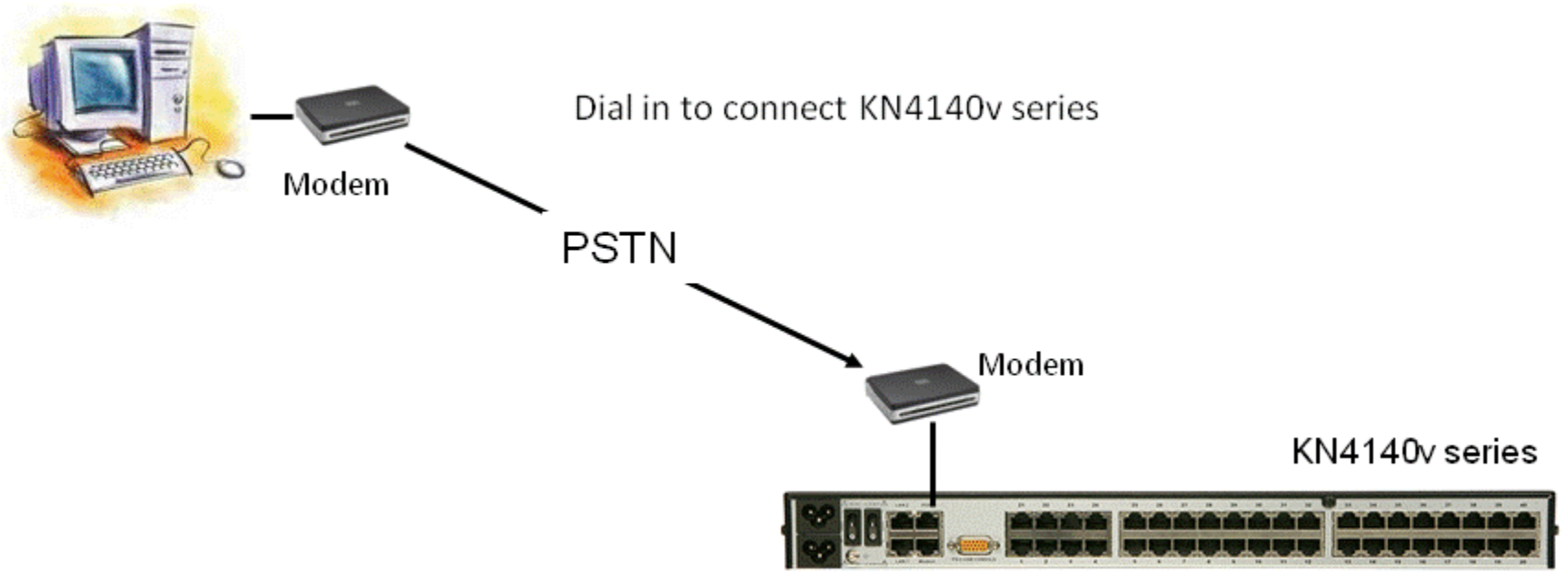
OOBC – Dial in mode



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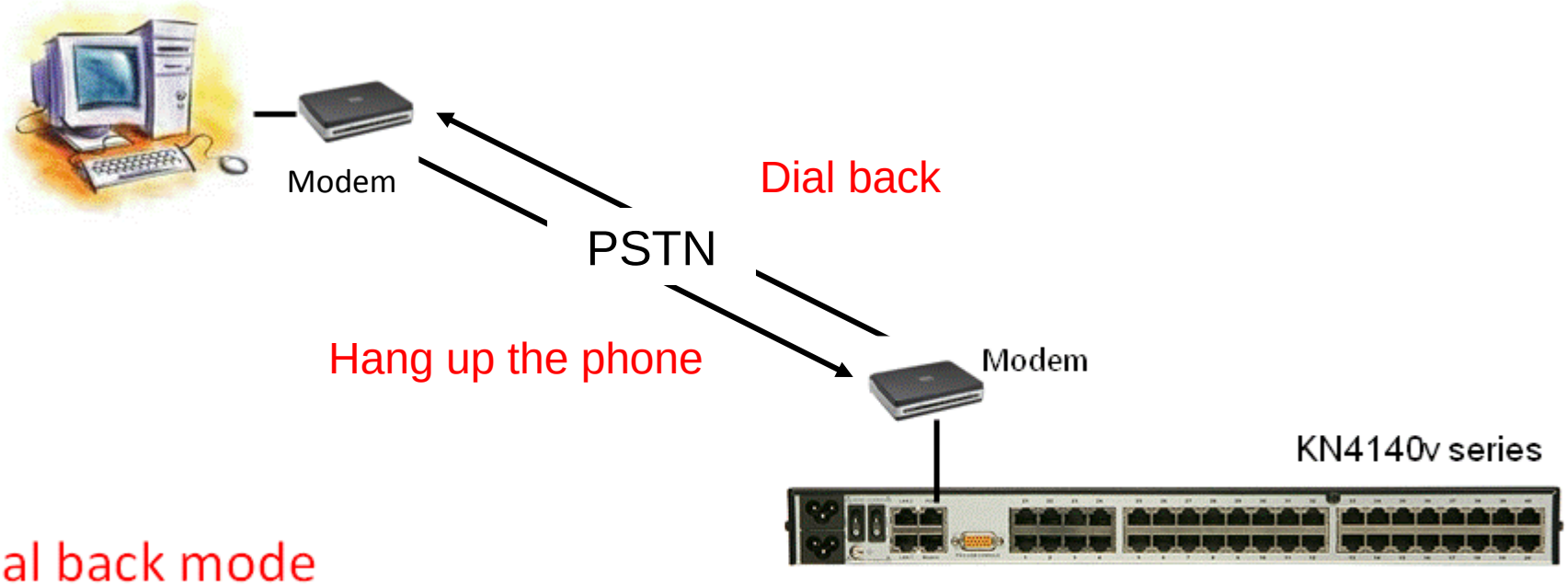
OOBC – Dial back mode



Dial back mode

1. Fixed number dial back
2. Flexible number dial back

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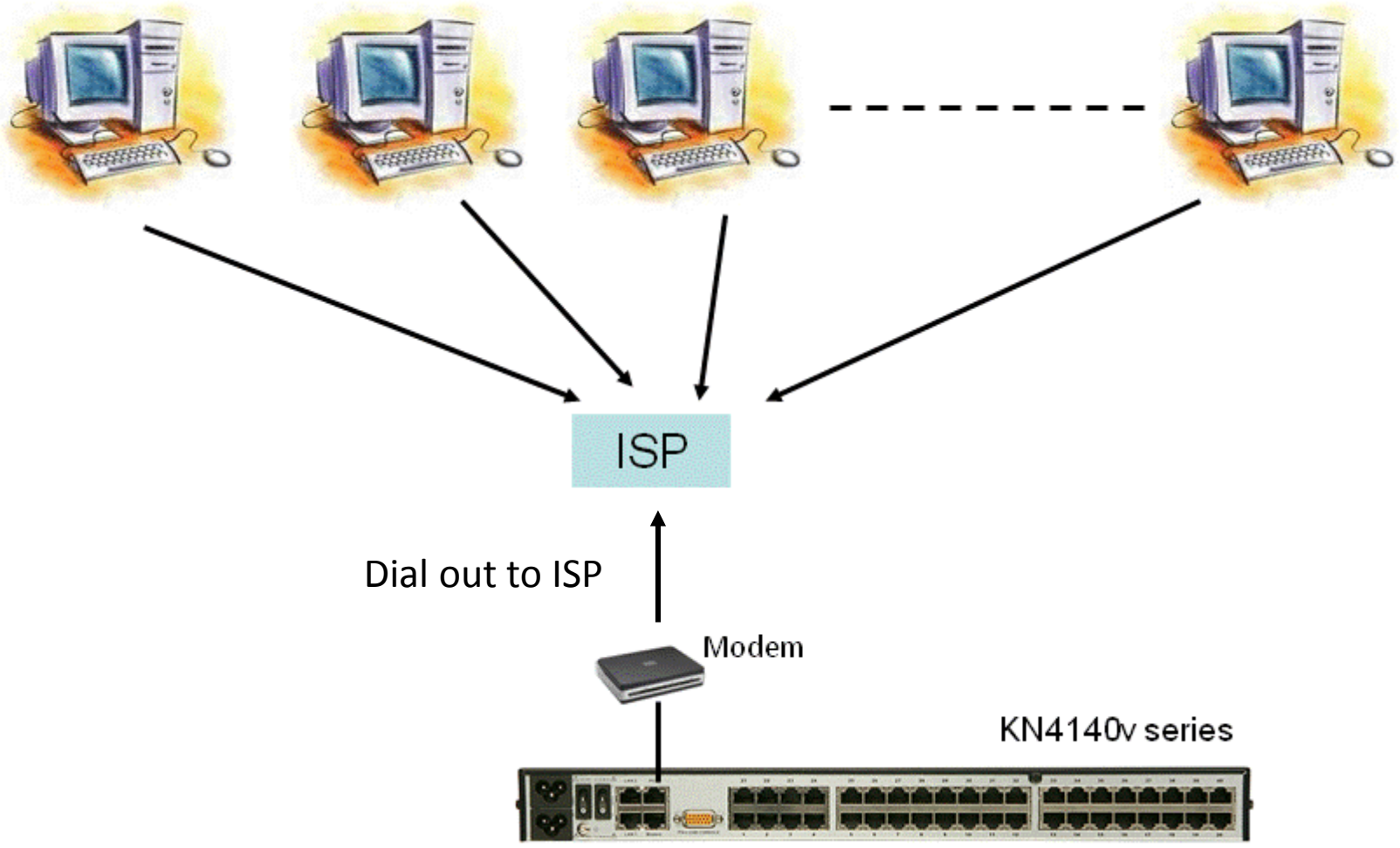
OOBC – Dail out mode



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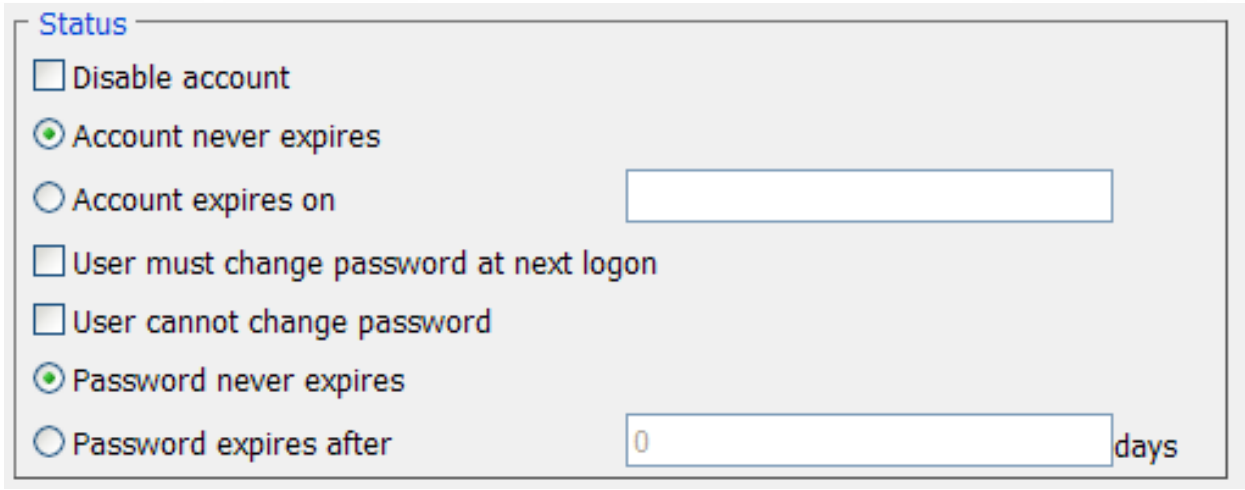
Advanced Password Policy



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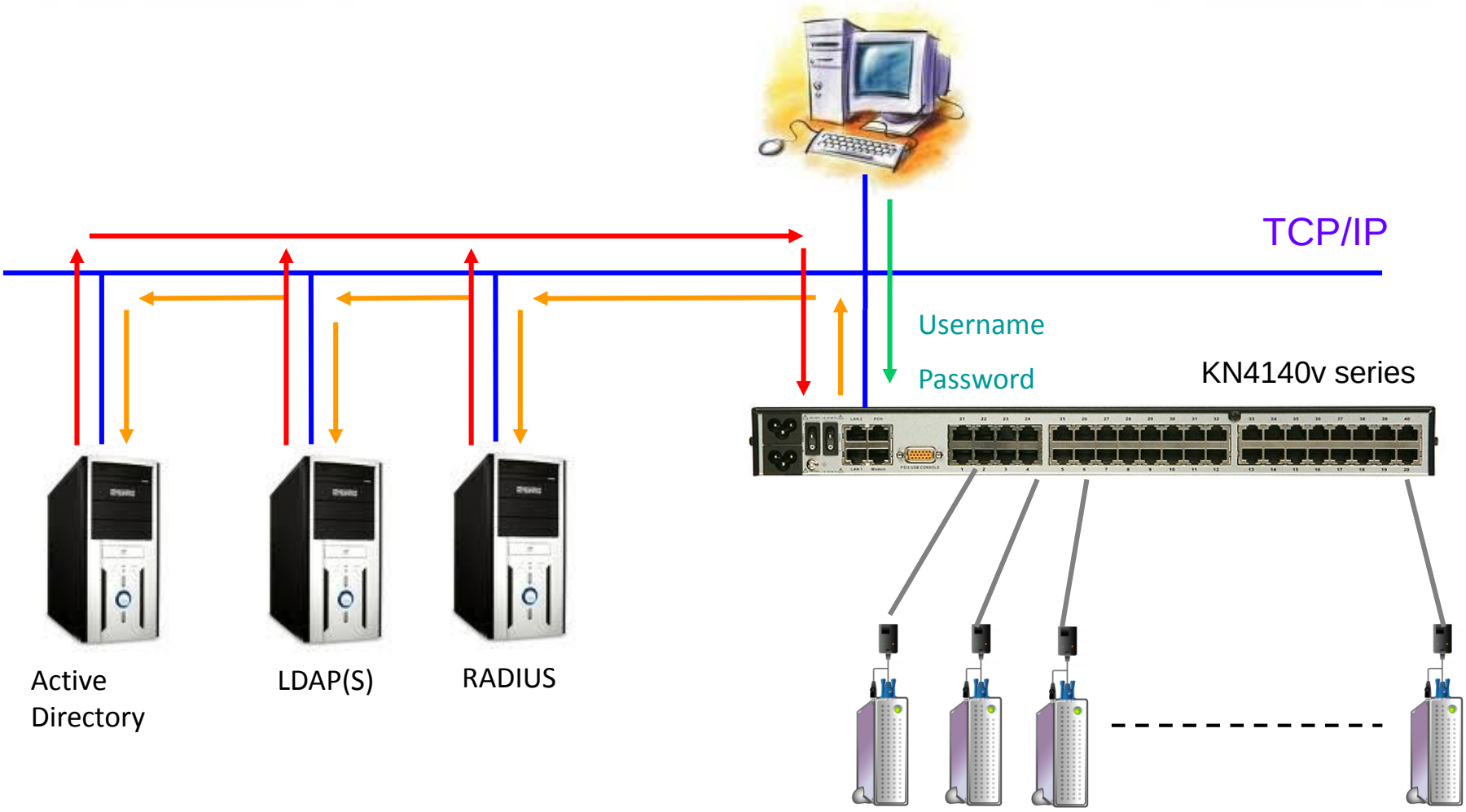
Third-party Authentication



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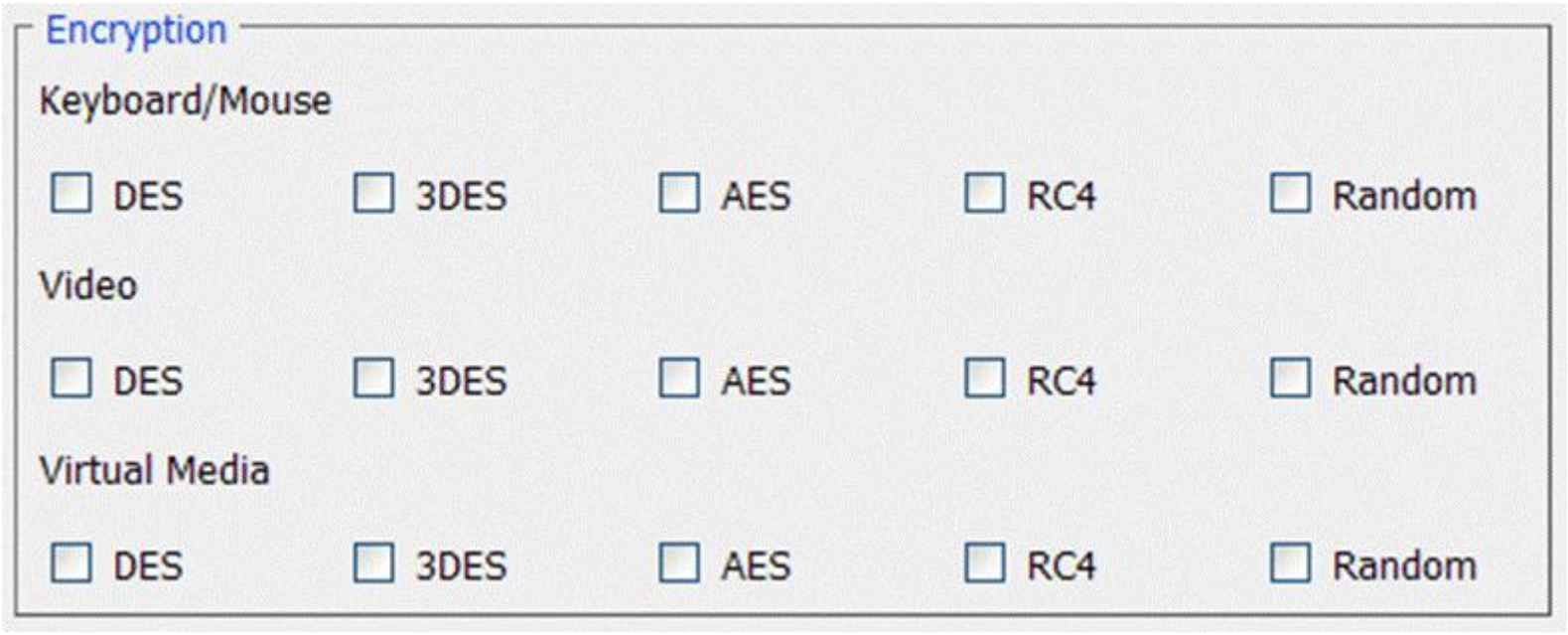
Flexible encryption



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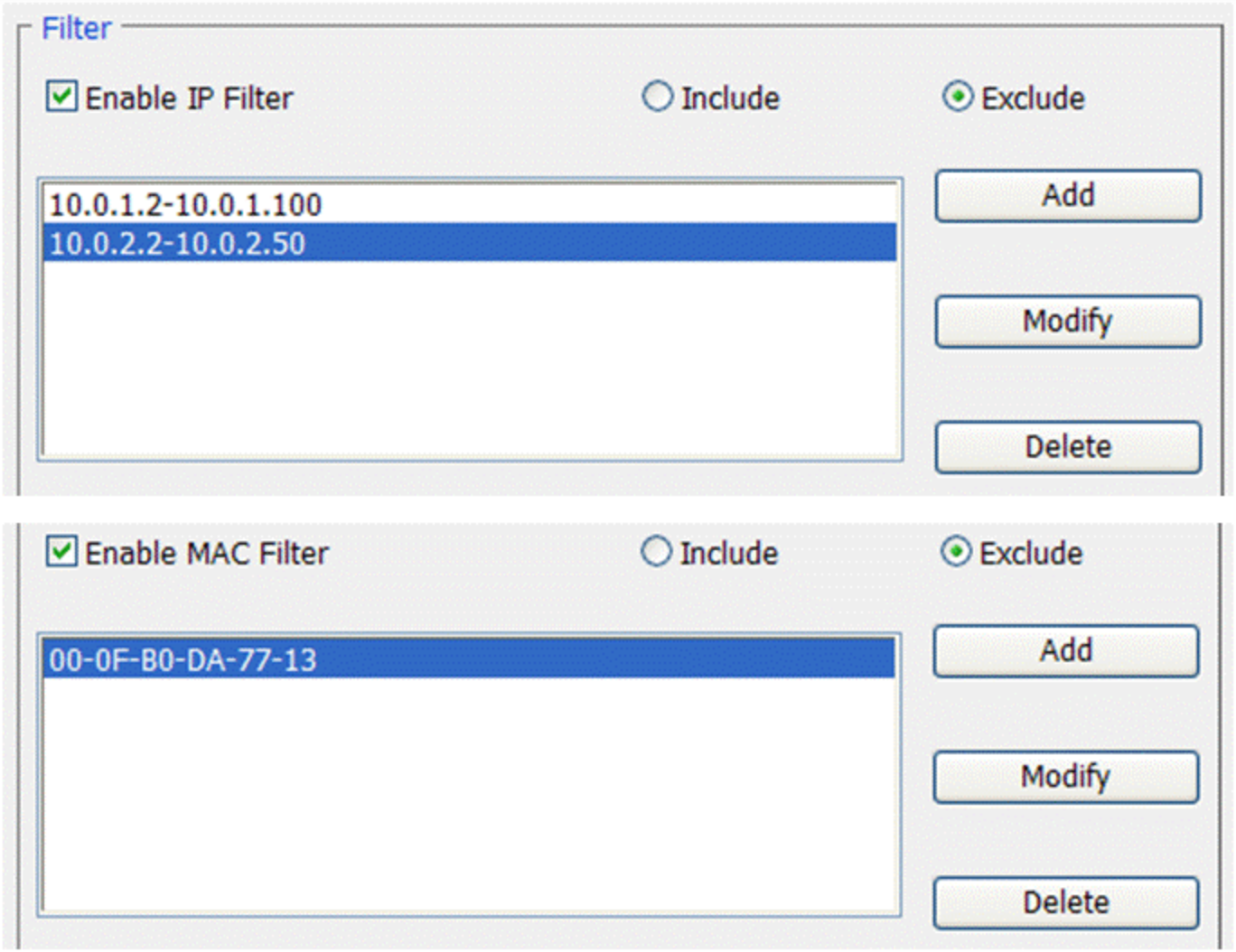
IP / MAC filter



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User and Group Permission Table

Access Information:

Name	Access	Mount USB	Config	PON
administrator	✓	✓	✓	✓
cstan	✓	✗	✗	✗
kurtchang	✓	✓	✓	✓
jonaschen	✓	✓	✓	✓
jonman	✗	✗	✗	✗
rjf111	✓	✓	✓	✓
kurt	✗	✗	✗	✗
user	✓	✗	✗	✗
guest1	✗	✗	✗	✗
guest2	✗	✗	✗	✗
TechDoc	✗	✗	✗	✗
R&D1	✗	✗	✗	✗
TechDoc-01	✗	✗	✗	✗

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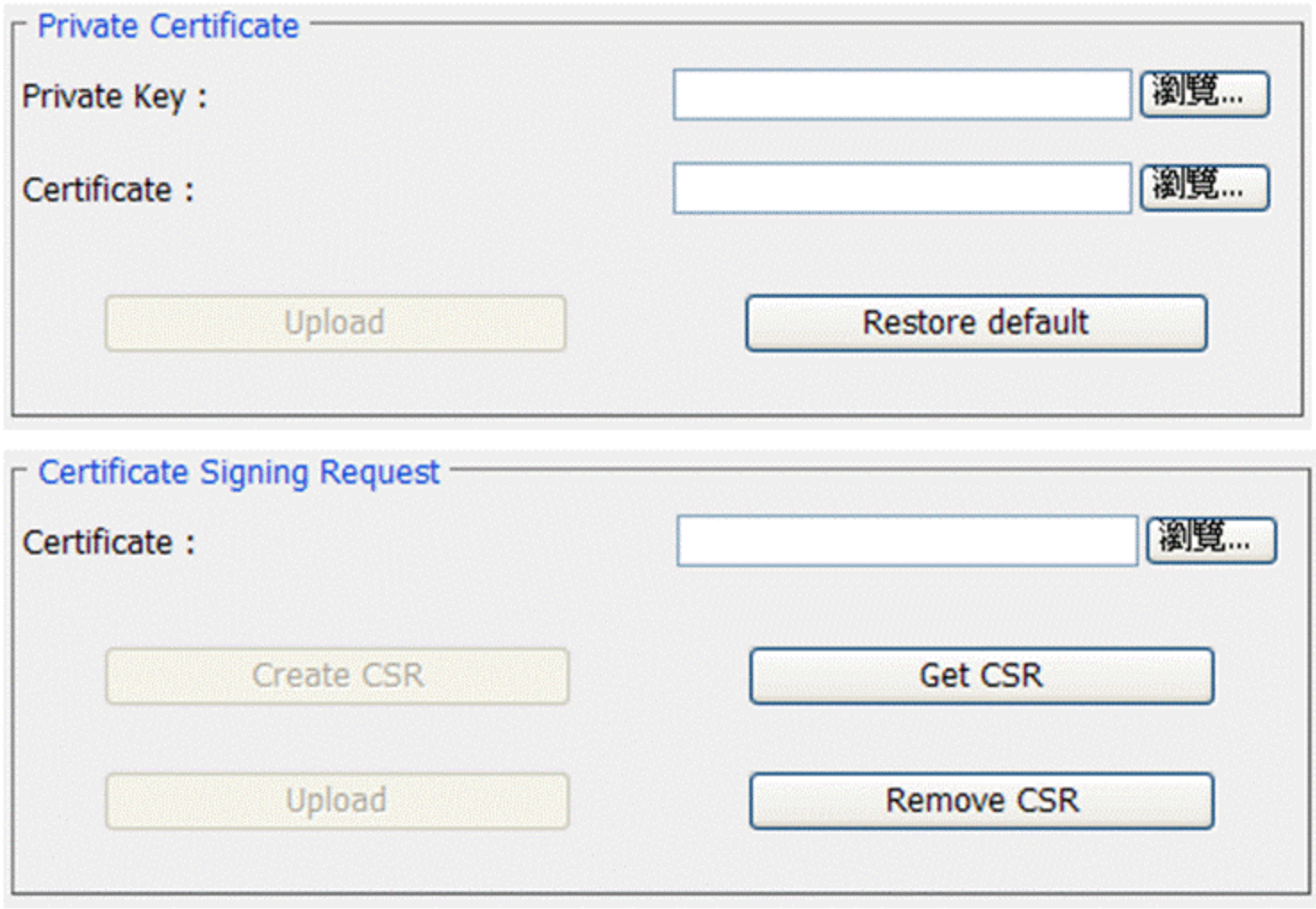
Private Certificate Authority Creation



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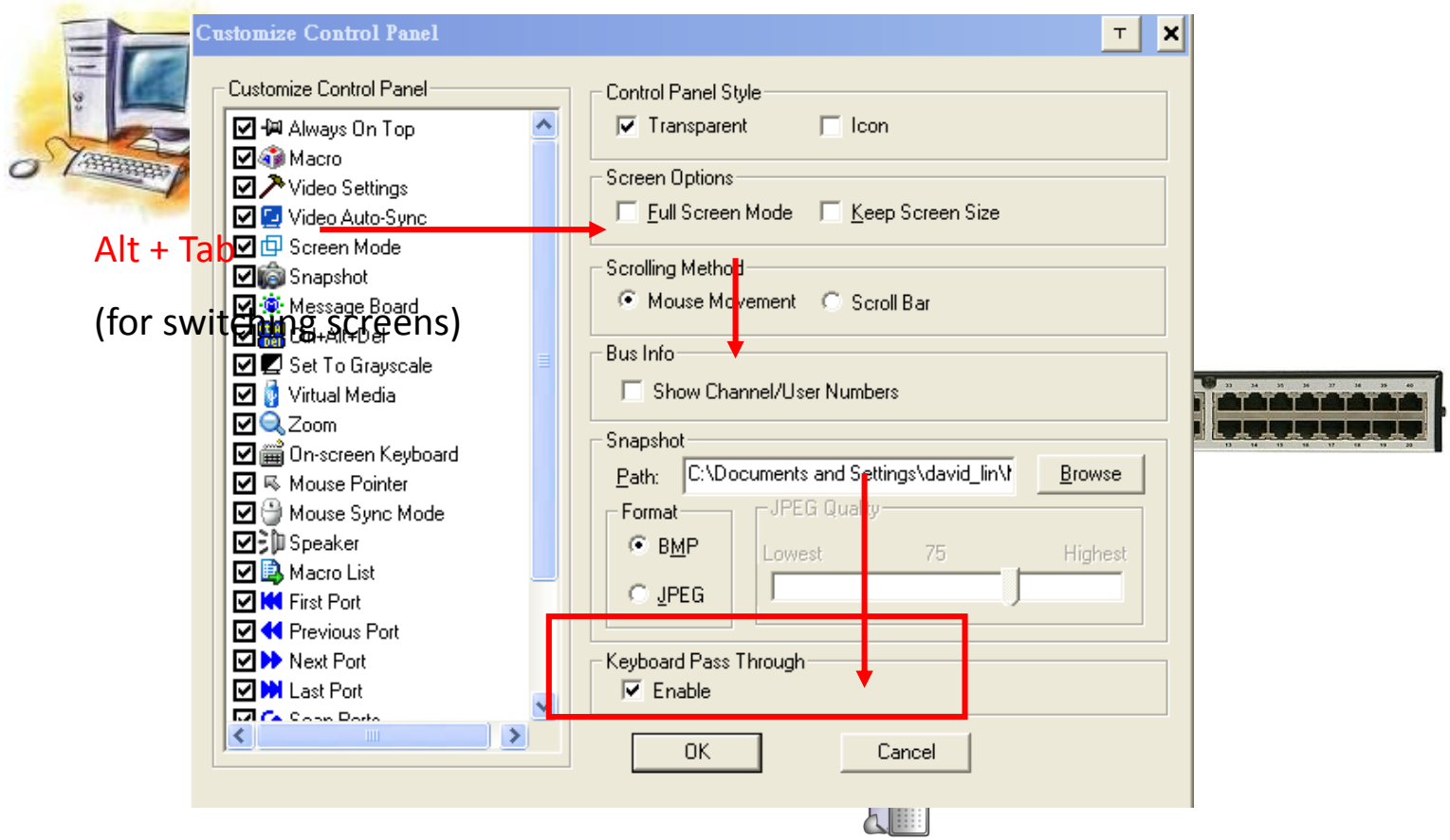
Keyboard Pass Through



Alt + Tab

(for switching screens)

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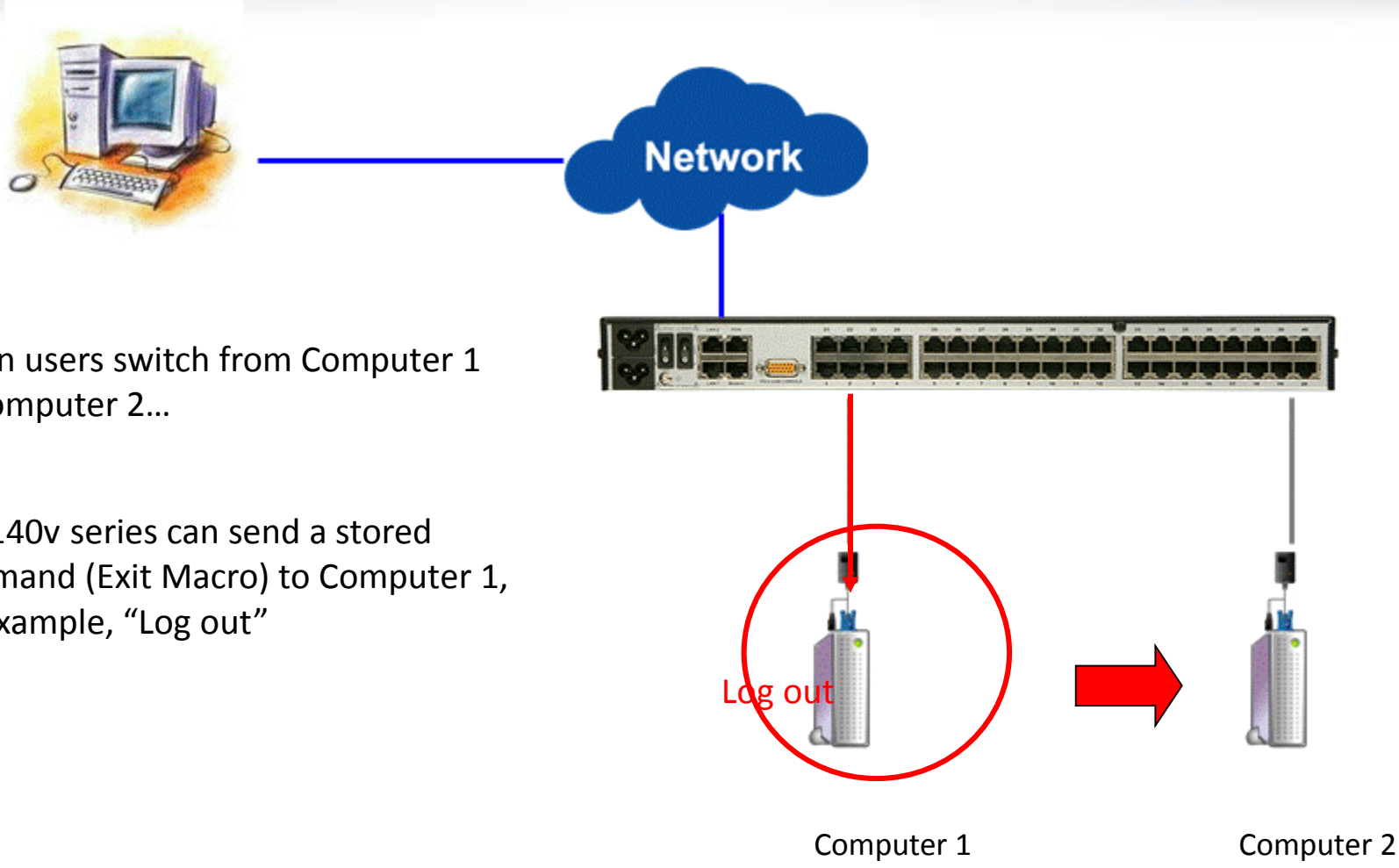
Exit Macro

When users switch from Computer 1 to Computer 2…

KN4140v series can send a stored command (Exit Macro) to Computer 1, for example, “Log out”



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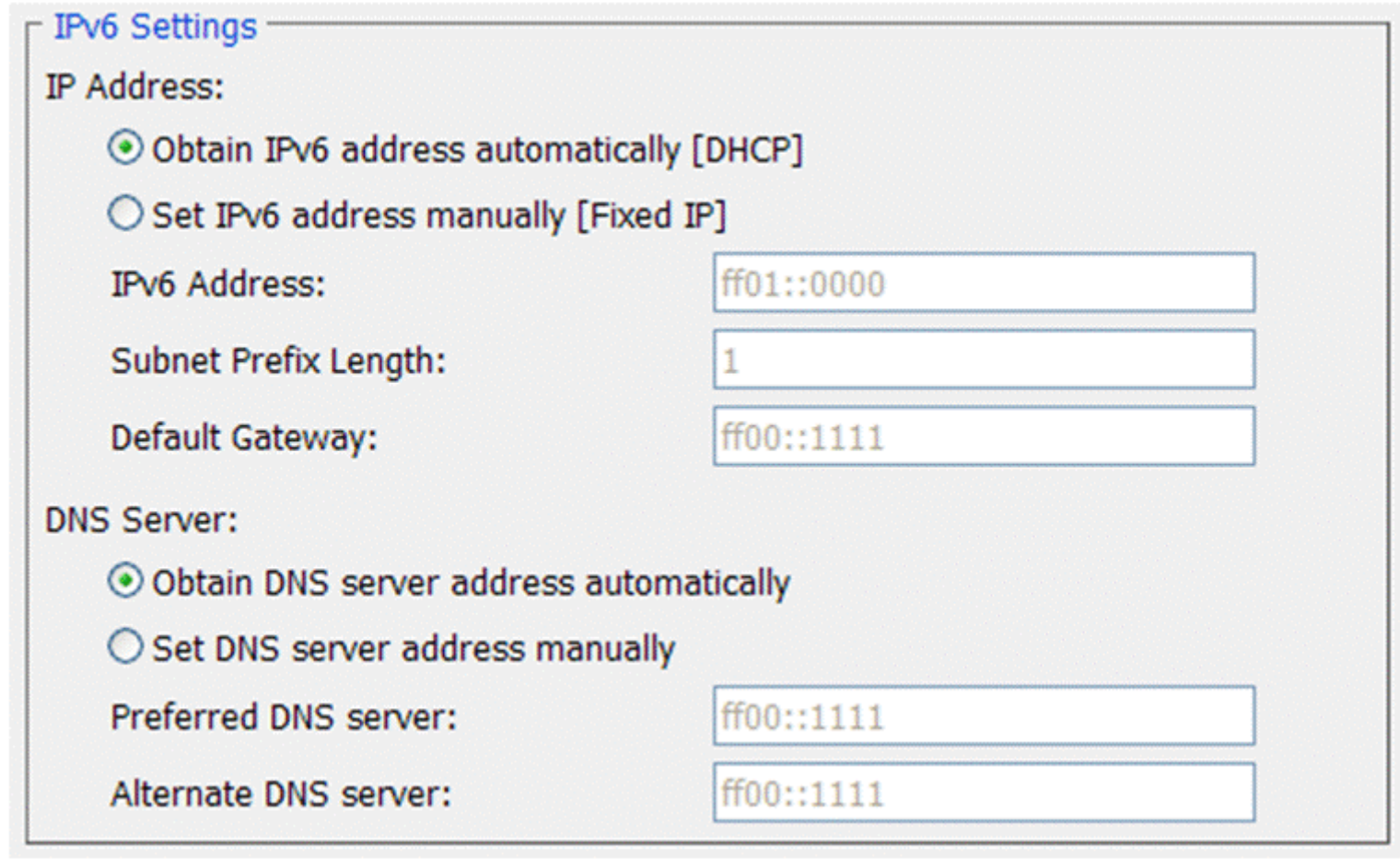
IPv6



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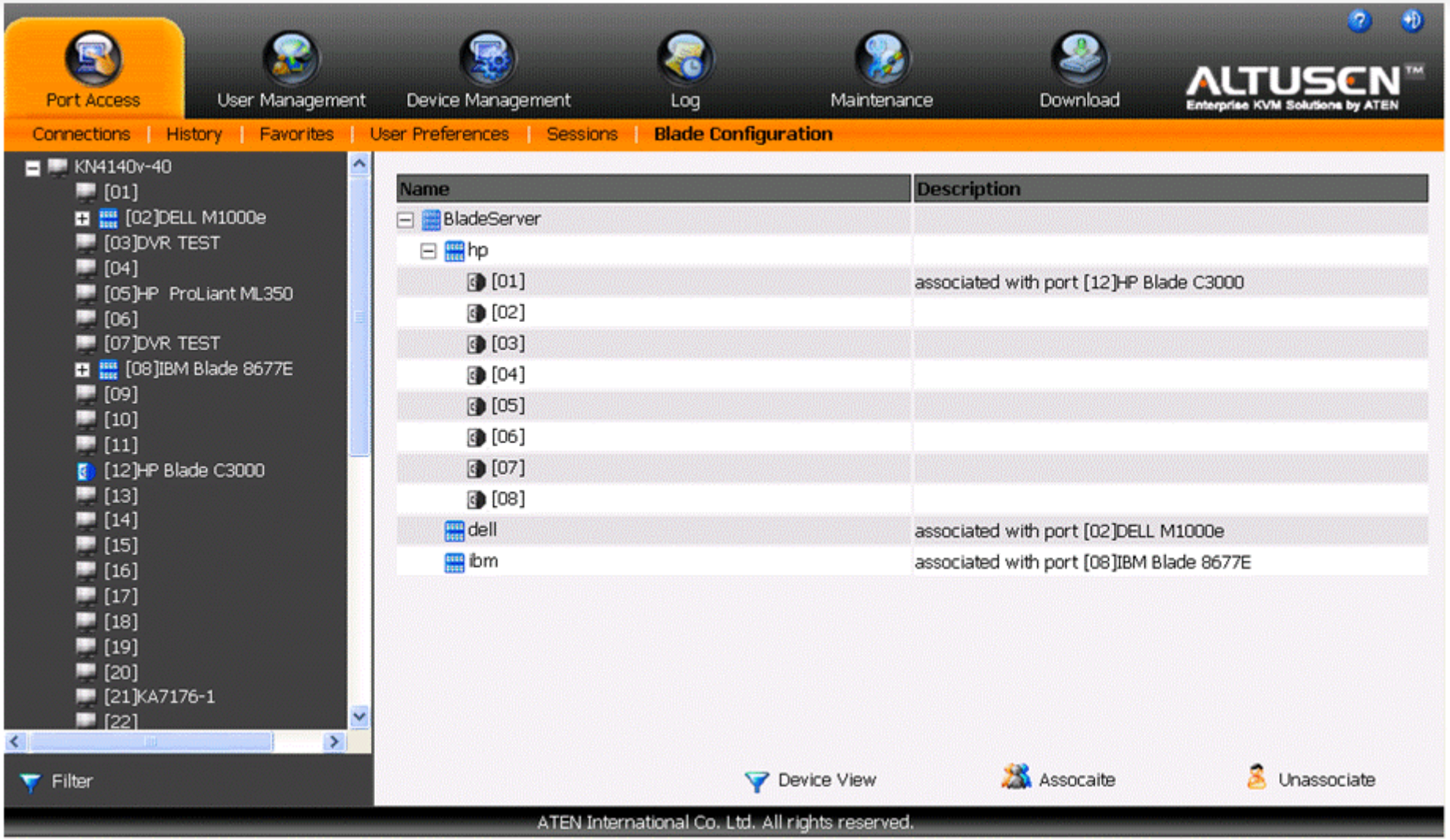
Blade Server



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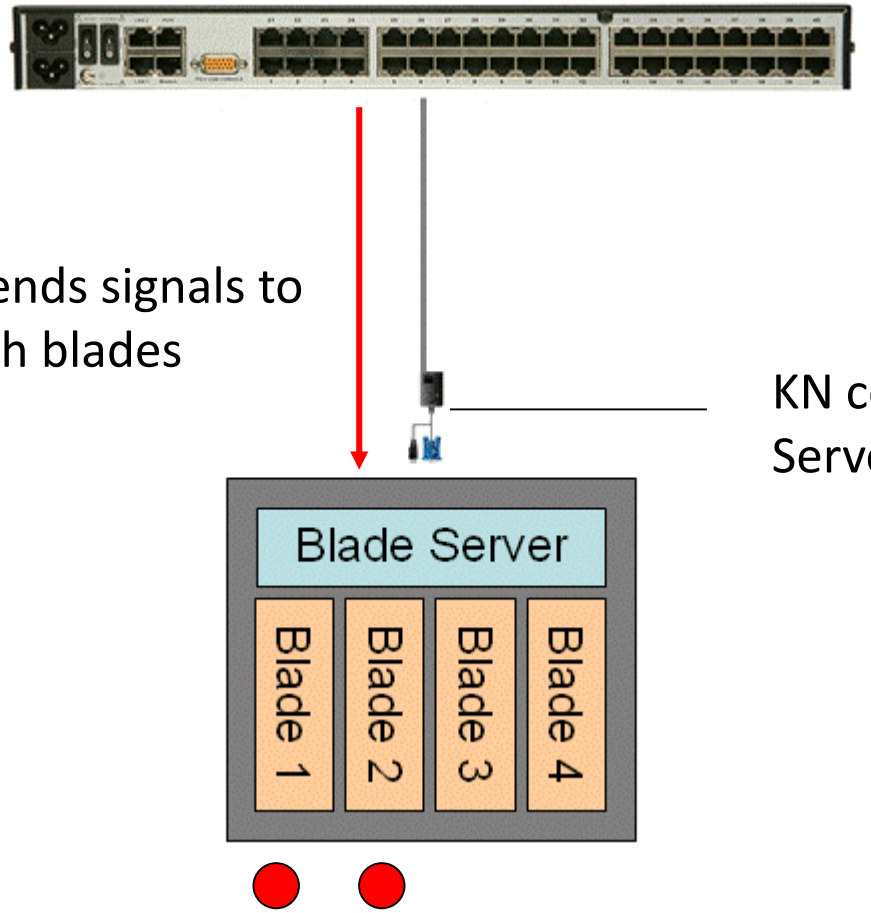
Blade Server (How it works?)



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KVM Adapter Cable Compatibility

Model	KH1508/ KH1516	KH1508i/ KH1516i	KH2508/ KH2516	KH2508A/K H2516A	KL1508/ KL1516	KL1508A/ KL1516A	KN2124v/ KN2140v/ KN4124v/ KN4140v	KN2116A/ KN2132/ KN4116/ KN4132	KM0532/ KM0932/ KM0032
KA7120				O		O	O	O	O
KA7130				O		O	O	O	O
KA7140							O	O	O
KA7170				O		O	O	O	O
KA7175							O		
KA7176							O		O
KA7520				O		O			
KA7570				O		O			
KA7920				O		O			
KA7970				O		O			
KA9120	O	O	O	O	O	O	O	O	O
KA9130	O	O	O	O	O	O	O	O	O
KA9140	O	O	O	O	O	O	O	O	O
KA9170	O	O	O	O	O	O	O	O	O
KA9520	O	O	O	O	O	O			
KA9570	O	O	O	O	O	O			

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